

# THE EFFECTS OF SOCIAL MEDIA ON STUDENT'S ACADEMIC PEFORMANCE AND SOCIAL INTERACTIONS IN THE UNIVERSITY OF YAOUNDE I

A dissertation submitted and defended on the 22<sup>th</sup> July 2023 in fulfilment of the requirements for

the award of a master's degree in education.

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TABLE OF CONTENT i
DEDICATIONii
CERTIFICATIONiii
ACKNOWLEDGEMENTS iv
LIST OF TABLESv
LIST OF ABBREVIATIONS vi
ABSTRACT vii
RESUME viii
CHAPTER ONE1
INTRODUCTION1
CHAPTER TWO
LITERATURE REVIEW18
CHAPTER THREE63
METHODOLOGY63
CHAPTER FOUR74
RESULTS74
CHAPTER FIVE
DISCUSSION
REFERENCES
TABLE OF CONTENTS

## TABLE OF CONTENT

### **DEDICATION**

This work is dedicated to my entire family (Bih Neba Dorothy, Ngum Margeret Neba, Neba Neh, Fuh Che, Ngum NCHUABEA, Lucy Michelle, Barbie) for their love, care and support through out this process.

### CERTIFICATION

This is to certify that this dessertation entitled **"The effects of social media on student's academic performance and social interactions in the University of Yaounde 1"** was carried out by, **Fuh Lemngwankhuh Afanwi** with registration **Number 21V3847** for the award of a Master (M.Ed) Degree in the Department of Curriculum and Pedagogy of the Faculty of Education of the University of Yaounde 1, under my supervision.

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### ACKNOWLEDGEMENTS

My profound gratitude goes to all who contributed directly or indirectly to the realization of this work.

I wish to express my deepest gratitude to my HOD Prof. Maigari Daouda for his moral support.

I wish to express my deepest gratitude to my supervisor Dr. Shaibou Abdoulai Haji for tireless efforts to correct my work and see into it that it goes on well. Your time invested in me is greatly appreciated.

I would like to pay my special regards to all the lecturers of the Department of Curriculum and Evaluation of the Faculty of Education for the knowledge given in class which served as a backbone for this work.

My appreciation goes to all my family members who have been so supportive during this work for financial and moral support.

To all my lovely friends I say thank you for your material and moral support.

### LIST OF TABLES

Table 1: Forms of social media	19
Table 2: Distribution of target population	66
Table 3: Distribution of sample per school	67
Table 4: Variables and items	69
Table 5: Questionnaire options and corresponding weights on the Likert scale	69
Table 6: Summary of Questionnaires administered and Returned	74
Table 7: Age	75
Table 8: Gender	75
Table 9: The use of social media	76
Table 10: The use of social media and student's academic performance.	77
Table 11: The use of social media	79
Table 12: Model summary for social interaction	
Table 13: Model for Social interaction	
Table 14: Model summary for Academic performance	
Table 15: Model for Academic performance	
Table 16: Direct effect of IV on DV	
Table 17: Indirect effect(s) of IV on DV	

### LIST OF ABBREVIATIONS

SM: Social Media
SI: Social Interactions
AP: Academic Performance
UGT: Use and Gratification Theory
GPA: Grade Point Average
UY1: University of Yaounde 1
FALSH: Faculty of Arts, Humanities and Social Sciences
FS: Faculty of Sciences
FMBS: Faculty of Medicine and Biomedical Sciences
FED: Faculty of Education
WAEC; West African Examination Council
HTTC: Higher Teachers Training College
IV: Independent Variable
DV: Dependent Variable
MV: Mediating Variable
RQ: Return Rate of Questionnaire
AQ: Administered Questionnaire
<b>DID</b> : Didatics of Discipline
SRS: Simple Random Sampling
IE: Indirect Effect
CI: Confidence Interval
R: Pearson R Coefficient

#### ABSTRACT

The main purpose of this study was to examine the effects of social media on student's academic performance and social interactions in the University of Yaounde 1. The study was carried out in the University of Yaounde 1 in the Center Region of Cameroon and involved masters students of the above institution. Three research questions and three hypotheses tested at 0.05 level of significance, provided focus to the study. Specifically, the study sought to; examine the effects of social media on students' academic performance in UY1, to examine the effects of social media on students' social interactions in UY1 and to evaluate the mediating effect of social interactions, on the use of social media and academic performance. Both the qualitative and quantitative research designs were used and questionnaire was the instrument of data collection from masters students of the University of Yaounde 1. The sample size consisted of 384 students of masters level from the four (4) faculties on the main campus (Faculty of science, Faculty of education, Faculty of medicine and biomedical science, Faculty of arts, letters, humanities and social science) of the University of Yaounde 1. The study found that social media has a significant effect on student's academic performance and a significant effect on social interactions. In terms of mediating effect, there is an indirect effect between student's social interactions on social media and student's academic performance. Hence effective student social interactions will enhance student academic performance when using social media. The study concludes that a good knowledge on how to use social media platforms for learning will lead to better academic performance from students and recommends that workshops be organised to educate teachers and students on how to use social media platforms for learning.

Key words: Social media, Social interactions and Student's academic performance.

#### RESUME

L'objectif principal de cette étude était d'examiner les effets des médias sociaux sur les performances académiques et les interactions sociales des étudiants à l'Université de Yaoundé 1. L'étude a été réalisée à l'Université de Yaoundé 1 dans la Région Centre du Cameroun et a impliqué des étudiants en master de l'établissement ci-dessus. Trois questions de recherche et trois hypothèses testées à un niveau de signification de 0,05 ont permis de cibler l'étude. Plus précisément, l'étude visait à; examiner les effets des médias sociaux sur les performances académiques des étudiants en UY1, examiner les effets des médias sociaux sur les interactions sociales des étudiants en UY1 et évaluer l'effet médiateur des interactions sociales, sur l'utilisation des médias sociaux et les performances académiques. Les plans de recherche qualitatifs et quantitatifs ont été utilisés et le questionnaire a été l'instrument de collecte de données auprès des étudiants en master de l'Université de Yaoundé 1. La taille de l'échantillon était de 384 étudiants de niveau master des quatre (4) facultés du campus principal (Faculté des sciences, Faculté d'éducation, Faculté de médecine et des sciences biomédicales, Faculté des arts, lettres, sciences humaines et sociaux) de l'Université de Yaoundé 1. L'étude a révélé que les médias sociaux ont un effet significatif sur les performances scolaires des étudiants et un effet significatif sur les interactions sociales. En termes d'effet médiateur, il existe un effet indirect entre les interactions sociales de l'étudiant sur les médias sociaux et la performance scolaire de l'étudiant. Par conséquent, des interactions sociales efficaces entre étudiants amélioreront les performances scolaires des étudiants lors de l'utilisation des médias sociaux. L'étude conclut qu'une bonne connaissance de l'utilisation des plateformes de médias sociaux pour l'apprentissage conduira à de meilleures performances scolaires des étudiants et recommande que des ateliers soient organisés pour éduquer les enseignants et les étudiants sur la façon d'utiliser les plateformes de médias sociaux pour l'apprentissage.

### **CHAPTER ONE**

### **INTRODUCTION**

The expansion of technological developments and the abundance of various social media platforms have changed the pattern of our communication by removing physical and temporal boundaries (Tobin, 2019). With ongoing technological advancements, social media will continue to evolve and influence its users towards various ends, including educational aspects (Kapoor et al., 2018). In the domain of education and learning, social media platforms provide avenues exchanging knowledge, ideas and can be used to arrange events or discussions, support courses, reading groups and provide space for communication and interaction (Ansari and Khan, 2020). Thus, social media plays a significant role in promoting and facilitating the process of today's academic education by creating virtual communities (Kapoor et al., 2018).

Social media plays a variety of roles in education as highlighted by Al-Khalifa and Garcia (2013), which include providing a channel to share ideas as well as allowing students to build their own communities to interact and work with each other, facilitating the art of learning and reaching out to the students in order to understand and teach them at the same time. As indicated by The Nielsen Company (2012), it is not difficult to note that social media use will always be a regular aspect in the daily life of most students.

Social networking sites and applications are widely used by students (Manjur et al.,2021). They spend a lot of their time on these sites as a part of their daily lives (Manjur et al.,2021). Studies revealed that among the various age groups of students, university students are among the most using social networking (Azizi et al., 2019). Social networking sites play a very important role in education (Manjur et al.,2021). Indeed, students are afforded multiple opportunities to improve learning and access the latest information by connecting with learning groups and other educational systems (Greenhow & Robelia, 2009). Students can also exchange information by connecting with different individuals (Manjur et al.,2021). This can have a positive impact on student learning outcomes (Yu et al., 2010). In the decade, the rate at which social media is used to connect with higher education students is increasing (Martinez-Aleman & Wartman, 2009). This in turn put pressure on members of faculty to use social networking within the classrooms and outside the classrooms to connect with students (Haji 2021; Zahid Amin et al., 2016). Social

networking sites have long been known as valuable platforms for educating and connecting people from various walks of life (Ahmad, 2011; Lenhart et al., 2010; Wodzicki et al., 2012).

Social media are usually on a large-scale membership and comprise of the social interactions (students' social pages) taking place using website services, online tools and the content (media) that are created and shared (Abbate, 2017; Naheed & Tasawar, 2014). Besides video, phone calls, and texting, many social interactions take place on social media for example Whatsapp, Facebook, Google classroom, Instagram, Twitter etc. (Rui Sun et al., 2022). On these platforms, users can post their own content, engage with others, and browse content (Escobar-Viera et al., 2018). Given that interaction among learners, instructors and content occur in all types and levels of education, regardless of delivery method (Haji 2020), interactions are essential components in education. However, learners in Higher Educational institutions tend to have fewer opportunities to interact with their instructors and peers in traditional face-to-face instruction (Achille, Eom & Wen, 2006). Interaction and sharing of contents using a social media is been facilitated by the internet (Eremie & Ikezam, 2021). Moore (1989) places learner interaction types into three main categories, learnercontent interaction, learner-instructor interaction and learner-learner interaction. Understanding these interactions and finding ways to support such interactions are essential (Cicillini & Salusso, 2019; Ping, 2011).. Many educational stakeholders agree that technology is an essential part of current efforts to improve learners' interactions (Gordon, 2014).

Studies show that interactions may influence learners' satisfaction and perceived learning outcomes in Higher education (Achille, Eom, & Wen, 2006; Eom, 2009; Swan, 2001). Interaction among the students and between students and the instructors as well as between students and content can be made possible through the use of discussion boards, email, and chat, among others (Haji 2020). These applications can also facilitate the social construction of knowledge (Haji, 2018; Hsu, 2007). Academic environments also play a role in this interaction (Asem 2019). Most universities require students to utilize the internet and other technological programs used by some instructors within academic classrooms (Alomari, 2019). Social interaction is becoming easier thanks to virtual environments, a situation that allows people to socialize in virtual environments (Uğur Gündüz, 2017). However, the purposes for using social media platforms varies according to each individual's needs. Since there are a variety of purposes for using social media among students, there are numerous studies focusing on the advantages and disadvantages of social media use and how it influences university students in particular (Al-Rahmi, Othman, & Yusuf, 2015;

Amankwaa & Boateng 2016; Russo et al., 2015). Furthermore, the impact of social media use on university students has not been studied from all aspects. Social media use has different effects on people as a whole and, as a result, must have a unique influence on university students (Alomari, 2019).

As a result of the influence social media has on students, many studies have focused on university students and their relationship with social media (Giunchiglia, Zeni, ElisaGobbi, Bignotti, & Bison, 2018; Lin & Sackey, 2015; Mushtaq, 2018; Said, Alshuaibi, Said, Alshuaibi, & Shamsudin, 2017). These studies have emphasized that new technology is highly attractive and appealing to youth in any society (Lin & Sackey, 2015; Mushtaq, 2018; Said et al., 2017). In fact, university students are exposed to social media the most and as a result, adopt many new technologies through social media platforms. In addition, there have been various views and opinions which recognize four major advantages of social media use in higher education which include; enhancing relationship, improving learning motivation, offering personalized course material, and developing collaborative abilities (Wheeler, Yeomans and Wheeler, 2008; Rifkin, Longnecker, Leach and Ortia, 2009). Also, Liccardi et al (2007), argued that students are socially connected with one another and therefore share their daily learning experiences and do conversation on various topics through social media whereas Kuppuswamy and Shankar (2010), reviewed that social network websites grab students' attention and then diverts it towards noneducational and inappropriate actions including useless chatting. Research has proved the heavy presence of social media usage among student. (K.J Bernard and Patience E.D, 2018). Wiley and Sisson (2006), for instance argue that previous studies have found that more than 90% percent of tertiary school students use social networks.

Students can express their everyday learning experiences via social media, which has a positive effect on academic success (Amin et al., 2016; Hasnain, et al., 2015; Khan, 2012; Liccardi et al., 2007; Tariq et al., 2012). Existing studies have shown the importance of studying learner interactions and how they may influence learners' perceived learning outcomes in higher education (Lin et al., 2017). It is also found out that, students use social networking sites (SNSs) approximately thirty (30) minutes throughout the day as part of their daily routine life (Nicole, Charles, and Cliff, 2007). This shows the level at which students are patronizing these sites and this may bring along both positive and negative effects on students as far as their academic performance is concerned. Academic performance or achievement is the outcome of education,

the extent to which a student, teacher or institution has achieved their educational goals (Eremie & Ikezam,2021). Academic performance is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important, procedural knowledge such as skills or declarative knowledge such as facts (Raymond & Afua, 2016; Santoveña-Casal, 2019; Stacy, 2018; Tarek & Yasmin, 2015). The role of academic performance as one of the predictors of students' success and also in the aspect of academic placement in schools to higher institutions as well as the level of employability in individual's career is inevitable (Osharive, 2015). Academic performance plays an important role in the life of a student as it determines his or her placement in the academic institutions or job (Eremie & Ikezam,2021). Due to this, many parents, teachers, guardians, students and well-wishers are concerned with the ways their students can enhance their academic performance. Students who engage actively in learner-learner interactions such as discussion forums and other types of online social participation such as group chats, also display high levels of cognitive engagement (Delaney et al., 2019). Their contribution to knowledge and inquiries is matched by their engagement in their learner-learner interactions (Ouyang and Chang, 2019).

### **Background of the study**

### **Historical background**

The role of media changed when the internet was developed in the 20th century (Kung, Picard, & Towse, 2008). As a result, the information technology revolution facilitated a technological development called "social networking sites" (Asem Alomari, 2019). These platforms, commonly known as social media platforms, allow users to communicate easily and instantaneously (Larson & Acheaw, 2015). The emergence of social media can be traced back to the late 1990s with the launch of the first social networking site, Six Degrees, in 1997 (Boyd & Ellison, 2008). However, it wasn't until the early 2000s that social media really took off, with the launch of platforms like Friendster, MySpace, and LinkedIn (Kaplan & Haenlein, 2010). This service was followed in 2001 by Friendster. These rudimentary platforms attracted millions of users and enabled email address registration and basic online networking. Weblogs, or blogs, another early form of digital social communication, began to gain popularity with the 1999 launch of the LiveJournal publishing site. This coincided with the launch of the Blogger publishing platform by the tech company Pyra Labs, which was purchased by Google in 2003.

In 2002, LinkedIn was founded as a networking site for career-minded professionals. By 2020, it had grown to more than 675 million users worldwide. It remains the social media site of choice for job seekers as well as human resources managers searching for qualified candidates. Two other major forays into social media collapsed after a burst of initial success.

In 2003, Myspace launched. By 2006, it was the most visited website on the planet, spurred by users' ability to share new music directly on their profile pages. By 2008, it was eclipsed by Facebook.

Facebook was founded in 2004 by Mark Zuckerberg and quickly became the dominant social networking site, with over 2.8 billion active users as of 2021 (Facebook, 2021).

Google's attempt to elbow its way into the social media landscape, Google+, launched in 2012. Other popular and modern social media platforms include Whatsapp, Twitter, YouTube, Instagram, Snapchat, and TikTok.

Instagram, founded in 2010 by Stanford graduate Kevin Systrom as a photo sharing site and purchased by Facebook in 2012, Instagram has more than 1 billion users worldwide.

Twitter was founded in 2006 by Jack Dorsey, Evan Williams, Biz Stone, and others as a microblogging site.

Snapchat was founded in 2011 by a trio of Stanford students — Evan Spiegel, Reggie Brown, and Bobby Murphy — this video-sharing service introduced the concept of "stories," or serialized short videos, and "filters," run for informative digital effects, often based on location.

Tiktok founded in 2016 by Chinese tech company ByteDance, this shortform video-sharing site was merged with the U.S.-based mobile app Musical.ly in 2018 and became popular with American teens and young adults. As of early 2020, it had more than 800 million users worldwide. Social media has had a profound impact on society, changing the way we communicate, share information and consume media (Kaplan & Haenlein, 2010).

Social media has revolutionized the way people communicate and interact with each other. It has provided us with new and innovative ways to connect with people from all over the world, share our thoughts and ideas, and keep up to date with news and current events.

One of the key features of social media is the ability to create and share content. Users can post text updates, photos, videos, and links to other websites, allowing them to express themselves in a variety of ways. This has led to the rise of influencers, who use social media to build their personal brand and attract followers.

Another emerging trend in social media is the use of augmented reality (AR) and virtual reality (VR) technology. Social media platforms like Snapchat and Instagram have introduced AR filters and effects, while Facebook has invested heavily in VR technology. This has opened up new possibilities for social media, allowing users to experience immersive, interactive content in new and innovative ways.

Overall, social media has had a profound impact on society, as social media continues to evolve, it will be important to address its challenges and ensure that it is used in a responsible and ethical manner.

#### **Theoritical background**

This study will be guided by well-established theories that have been utilized in the research field of communication and mass communication studies, which are the Uses and gratification theory (Weiyan, 2015) and the theory of Socio-constructivism (Vygotsky (1978). The Use and Gratification theory was introduced in 1973 by Bulmer and Katz, communication scholars, who sometimes referred to their theory as "UGT" (Katz et al., 1973). The uses and gratification theory's fundamental aim was to understand why and how mass media platforms are commonly used by societal members in their everyday lives. In other words, the theory describes the relationship between mass media platforms and their audience to determine how they influence each other (Weiyan, 2015; West & Turner, 2014). These platforms can include traditional platforms such as television, radio, newspaper, and magazine. However, this study focuses on advanced technology, which is the foundation for numerous social media platforms, such as Facebook, Twitter, Snapchat, and Instagram (Al-Jabri, Sohail, & Ndubisi, 2015). Also, Uses and gratifications theory (UGT) is a media use paradigm from mass communications research that guides the assessment of consumer motivation for media usage and access (Korhan, 2015). This theory was chosen for this work because, according to the Uses and gratification theory, the purpose of use varies among users based on their needs. In other words, the theory indicates that audiences lean toward specific social media platforms to satisfy particular gratifications or needs. It points out that the audience is active and does not fully accept media's exposures if those exposures do not satisfy the user's needs (Defleur, 2010; Katz, Blumler, & Gurevitch, 1973).

The theory of Socio-constructivism by the Russian psychologist Lev Vygotsky (Vygotsky (1978). The theory stipulates that, an individual's learning occurs through group interactions, the learner actively constructs knowledge through interactions rather than passively receiving information. The learning occurs in meaningful settings through collaborative elaboration in negotiation and collaboration with others (Bruner, 1999). It is suggested that social media technologies support these collaborative contexts for learning more than ever before. The traditional Higher Education models of teaching focused on one-way passive transfers of information from teacher to students in the form of lectures, hand-outs and textbooks. Social media provide a flexible space for the personalization of learning and increased communication between teachers and students (Gamble & Wilkins, 2014). Moreover, learning can occur through active participation and collaboration in extended interactions that are unrestricted by time and space (Haji, 2022).

In the context of this study, the theories holds that different students use social media for many reasons including academic purposes and learning occurs through group interactions, so we seek to understand the effect that social media has on the academic performance and social interaction of student of UY1.

### **Contextual background**

Social media has become increasingly popular in Cameroon, particularly among young people. The number of social media users in Cameroon at the start of January 2023 was 3.90 million social media users, but it's important to note that social media users may not represent unique individuals (Simon, 2023). The number of social media users in Cameroon at the start of 2023 was equivalent to 13.8 percent of the total population (Simon, 2023). Analysis reveals that social media users in Cameroon increased by 250 thousand (+5.8 percent) between 2021 and 2022 (Simon, 2023). Furthermore, data published of top social media platforms indicates that there were 3.80 million users aged 18 and above using social media in Cameroon at the start of 2023, which was equivalent to 26.2 percent of the total population aged 18 and above at that time (Simon, 2023). In addition, 30.2 percent of Cameroon's total internet user base (regardless of age) used at least one social media platform in January 2023 (Simon, 2023).

During the COVID-19 outbreak, there was a national and somehow international lockdown which made traditional face to face learning very difficult and almost impossible. As human beings, we always try to adapt to changing times which led to the shift from face to face learning to online learning and later blended learning. This brought about the use of social media in education because that was the only safe medium of communication. Platforms like Whatsapp, Google classroom, Facebook etc. were used for teaching, learning and social interactions. In the case of the Department of English Modern Letters, they opted for WhatsApp and Telegram for interactive classes. The choice of these two platforms is motivated by the fact that they are relatively cheap and accessible to almost all students (Nforgwei and Ümmü, 2022).

Also, according to the Law N°98/004 Of April 4, 1998 Orientation Of Education In Cameroon Section 25: Teaching in schools takes into account the evolution of science and technology and, in its content and methods, is adapted to economic, scientific, technological, social and cultural developments in the country and the international environment, so this study seeks to the effects of social media on social interactions and academic performance in UY1.

Furthermore, from the Mellinium Goals, due to population pressure, the education system should meet an increasingly strong demand in all educational modes. And statistically, higher education has experienced significant growth since 2000.

The evolution of internet technology has led to its use as the best medium for communication. Whereby, two-third of the world's internet population visits social networking or blogging sites, thus serving as a communication and connection tool (Ikezam and Eremie, 2021). Given the advantages of connecting to others online, the WHO suggested at the outbreak of the COVID-19 pandemic that people should use technology mediated communication to connect to others (World Health Organization, 2020b). In recent decades, social life includes technology-mediated communication, which allows people to maintain and expand their social networks despite physical distance (Lieberman & Schroeder, 2020). Pre-pandemic research suggests that communication via video, phone, and text is associated with better wellbeing, including reduced risk of loneliness (Teo et al., 2019), increased subjective wellbeing (Ahn & Shin, 2013), and reduced negative mood (Sacco & Ismail, 2014).

Social media are web-based technologies such as Facebook, WhatsApp, Twitter, Instagram, LinkedIn, Viber, YouTube, Skype, Google, Hangouts, Wikis, Blogs, Microblogs and multimedia sharing tools that allow users to connect to the internet to create and share content with other users (Schwartz, 2012). In recent years, the world has been introduced to educational technologies which has greatly contributed to the evolution of learning in higher education among which is social networking (Kehdinga George, 2019) The 21st century has seen a rise in the development of social networking sites (Mayong, 2017). In today's highly competitive learning world and given the development of the 21st century, social media is becoming an integral part of life especially in the

8

domain of education as schools and lecturers are integrating it into the classroom (Kehdinga, 2019). It is therefore, no secret that social media is at the center of most people's lives (Kehdinga, 2019). It is one of the educational technologies used in the modern world today. It is becoming more significant for billions of people every day and it holds an alternative pathway to responsive education especially since it influences how we live, work, and more than ever, how we learn.

In the past, the only way people communicated was face-to-face contact and the written word. This changed with the invention of the telephone and subsequent modification of other technologies which are used today. The invention of technology like social media has changed and greatly contributed to the evolution of continuous learning (Kehdinga, 2019). With the advent of modern technology, social media is becoming one of the fastest means of communication with many users. Social media has become more significant for learning in higher education, as students daily engage with it for their personal satisfaction, read or listen to the news amongst others. Social media has also grown to be a top platform for market research and decision-making process but also, it is a top platform for learning in Cameroonian higher education (Kehdinga, 2019). Today, everybody uses social media starting from the youngsters to the middle aged group. (Kemp, 2017). For example, Twitter has about three hundred million users, while Facebook has over 1.4 billion users, WhatsApp on the other hand has about one billion users engaging the app on a daily basis, while Instagram has about 800 million users, YouTube has over 1.3 billion users with over five billion videos watch on a daily basis (Kemp, 2017). Social media has emerged with the potential "social software" to increase dialogue, collaboration, networking and help establish social relationships based on common goals and interests (Mayfield, 2007; Ryberg, 2008; Safko & Brake, 2009; Mustonen, 2009; Joosten, 2012). With regards to education, several authors have emphasised the use of social media for better control and efficiency of resources to complement the work done in and out of the classroom. This is in order to improve students' learning, facilitate lecturer-student and student-student interaction, develop skills and competencies and the level of satisfaction into new learning experiences (Ajjan and Hartshorne, 2008). Learning has evolved alongside social and technological changes. Bisong (2015) points out that if we acknowledge the fact that learning has evolved with the use of technology, we could spend more time developing new methods of learning rather than complaining about the changes because learning reflects the reality and can provide insights to learning. Learning through social media is one activity among many others that encourages continuous learning. Today, more and more lecturers are

incorporating social media into classrooms to engage students and support their educational development, whether online or face to face (Kehdinga 2019). Unlike in the past, today, social media is shaping and influencing how students learn and interact. It improves learning and makes it better by allowing people to read, listen, react and build faster anywhere and at any time and more efficiently than ever before (Kehdinga, 2019). The rise of social media in the classroom has opened an alternative pathway for learning. The rate of social media users has increased recently in Cameroon (Kehdinga, 2019). Social media has become a way of life as most learners can own, operate and access laptops, ipads and mobile phones daily, Social media sites are gradually replacing all other platforms of learning, It is shaping and influencing how students learn and interact today (Kehdinga, 2019). Therefore, it is critical to contextualise the use of social media as a learning platform in Cameroonian higher education.

Facebook is the most popular social media platform among students at the University of Yaoundé I, with many students using it to connect with classmates, share information about academic programs and events, and engage in discussions on a wide range of topics (Achankeng, 2017). WhatsApp is also widely used for communication among students, particularly for group projects and study groups (Jiokeng, 2019).

Social media has also played a role in student activism at the University of Yaoundé I. In 2016, students used social media to organize protests against the government's decision to increase tuition fees, leading to a temporary shutdown of the university (BBC News, 2016).

However, social media use at the University of Yaoundé I is not without its challenges. There have been concerns about the spread of false information and hate speech on social media, particularly in the context of political and social tensions in Cameroon (Nnane, 2019). In addition, there have been cases of cyberbullying and harassment of students on social media platforms (Achankeng, 2017).

Despite these challenges, social media continues to be an important part of campus life at the University of Yaoundé I, providing students with new opportunities for communication, collaboration, and activism.

### **Conceptual background**

The concept of social media is rooted in the idea of social networking, which refers to the formation of online communities where individuals can connect with others who share similar interests or backgrounds (Boyd & Ellison, 2007). Also, according to Manning (2014) social media describes

new media approaches that involve communication between people or groups of people. Social media is a collection of applications and online websites, established together with the innovations of Web 2.0 that emphasise collaboration between users and user-generated content (Kaplan and Haenlein, 2010). Also, one could refer to social media as any media circulated with the help of social interactions. Basically, social media may be referred to the cybernetic and simulated relationships, among people, organizations, and companies etc., this entails the invention, sharing or exchanging or data in the form of texts, images, and symbols.

According to (Ahlqvist, 2008), it entails the process through which people interact by sharing, creating and exchanging information and ideas through virtual communities and networks. Social media is an aspect of ICT that has rapidly proliferated and penetrated almost every sector of human life. In our present days, it is almost a common practice for people to spend a major of their time making using of social networks. This is traceable to the fact that it is easy to use and it facilitates speeds and durability. Social media is fast changing the public discourse in our societies and setting trends and agendas in topics that range from the environment, education and politics to technology and the entertainment industries (Nami, 2010). It is therefore obvious that the modern reality requires one to stay in touch and keep abreast with the latest news and trends of our time. Users of social networks, in most cases as have been reported, are a representative of the younger generation. According to (Kaplan and Haenlein, 2010), social media which are internet-based applications are built on the Web 2.0 ideology and technology. The term "Web 2.0" was first coined in 2004 by Tim O'Reilly, the founder of O'Reilly Media, to describe a new generation of web applications that were emerging at the time. According to O'Reilly, Web 2.0 represented a fundamental shift in the way that the web was being used and developed. Key features of Web 2.0 included providing a rich user experience, where users interact with the data which is dynamically created from users' input, users act as contributors to a site through reviews as well as comments and allowing users to classify and find information through the art of tagging (Suraya, Abdul & Ghafoor, 2019). Web 2.0 has formed a solid foundation for social media as highlighted by Kaplan and Haenlein (2010) and the reverse of the relationship is noted by Hendler and Golbeck (2008).

One of the key features of social media is the emphasis on user-generated content and participation. As O'Reilly wrote in his seminal article on the subject, "social media is about harnessing the collective intelligence of users" (O'Reilly, 2005). This is reflected in the popularity of social networking sites like Facebook, which allow users to create and share their own content, connect with other users, and participate in online communities.

Another important aspect of social media is the use of technologies like AJAX and Flash to create more interactive and responsive user interfaces. As noted by O'Reilly, these technologies "enable richer user experiences, more user participation, and more interactive content" (O'Reilly, 2005).

Finally, social media is characterized by the use of open APIs and web services that allow developers to build on top of existing platforms and integrate different applications and services. This has led to the creation of a vast ecosystem of third-party applications and services that can be accessed and used by users across different websites and platforms.

Overall, social media represents a significant shift in the way that the web is being used and developed, with a greater emphasis on user participation, interactivity, and collaboration. As noted by O'Reilly, "Social media is a platform for the next generation of software, with new models for distribution, development, and monetization" (O'Reilly, 2005). There are several types of social media available today, including weblogs, social blogs web discussions, Wikis, microblogging, social bookmarking, social networks and podcasts (Greenhow and Galvin, 2020). Besides video, phone calls, and texting, many social interactions take place on social media (e.g., Facebook, Twitter), on these platforms, users can post their own content, engage with others, and browse content (Escobar-Viera et al., 2018).

Today, social media platforms have become a ubiquitous part of modern life, with billions of active users worldwide. Social media has transformed the way we communicate, share information, and consume media, and has had a profound impact on society as a whole (Kaplan & Haenlein, 2010). One of the key features of social media is the ability to create and share user-generated content. This means that anyone can create and publish their own content, whether it be a blog post, a video, or an image. This has led to a democratization of media, where individuals have the power to create and distribute their own content without the need for traditional gatekeepers like publishers or broadcasters (Jenkins, 2006).

Another important aspect of social media is the ability to connect with others and form online communities. This has led to the creation of powerful social networks where people can share information, offer support, and form lasting relationships (Boyd & Ellison, 2007).

Also, the development and growth of the technology in higher education has led to the worldwide spread of information and provided drastic changes to global communication and learners' interaction (Haji, 2020). Instructional methods that were difficult to be implemented due to the inability to give the much-needed attention to students have now become more comfortable to be carried out with the current advances in technology (Haji, 2020). The introduction and expansion of various technology-enhanced learning tools (emails, electronic journals, discussion boards, websites, search engines, online office hours via chat or webconferencing, electronic submission of assignments, school portal, and learning management systems) are causing numerous transformations in educational delivery and support processes in higher education institutions (Haji, 2020). Learning management systems (LMS) has become increasingly important in higher education institutions (Walker, Voce & Jenkins, 2016; Walker et al., 2014). Learning management systems are providing new modes of teaching and learning that modelled a significant challenge to the dominance of instructor-centred approach in higher education because of its limited scope in today's information age with too much information (Haji, 2020). Today's knowledge has a half-life that gets shorter all the time (Haji, 2020). As a result, teaching should focus on collaboration, interactivity, and promotion of learner-centred learning activities that promote the achievement of better learning outcomes and make the learner feel more satisfied with their learning (Haji, 2020). Learning management systems and school portal allow teachers and learners to make class announcements, submit assignments, share instructional materials, and communicate with each other (Haji, 2020). LMS is application software that has played a significant role in education. It can be designed to supplement and facilitate instructional activities such as course registration, analysing and reporting skill gaps, tracking learners' progress (Haji, 2020). Delivery of courses content supports the learning process and enables communication among learners and between learners and the instructor (Gilhooly, 2001; Umek, Aristovnik, Tomaževič & Keržič, 2015). LMS also can provide educational resources that are available online as a support for the individual learning process; connect educational resources to what is happening in class, both before and after interaction with learners (Haji, 2020).

### **Problem statement**

Social media has seamlessly integrated into the educational framework of Cameroon, specifically at the University of Yaoundé I, becoming a pervasive force due to its instantaneous communication capabilities. Its widespread adoption is driven by the ability to stay updated on global events,

engage in real-time communication, and swiftly share content (Asem, 2019). This popularity is heightened among university students who, in the contemporary connected world, maintain accounts across multiple social media platforms (Mohammad, 2015). As internet technology permeates various aspects of life, social media usage emerges as a prominent activity for adolescents and emerging adults, offering avenues for entertainment, communication, and information access (Freud & Weinhold, 2002; Vincent, 2020).

In the context of education, the rise of social media has ushered in a transformative pathway for learning, influencing how students interact and acquire knowledge. Unlike traditional methods, social media enables faster and more efficient engagement with educational content anytime, anywhere (Khan et al., 2012). However, the impact of social media on academic performance and social interactions among students is a nuanced aspect that warrants scrutiny. In higher education, social media has assumed a significant role, becoming a platform where students not only seek personal satisfaction but also consume news and engage in learning activities. The prevalence of social media in Cameroonian higher education is underscored by the extensive user base of platforms like Twitter, Facebook, WhatsApp, Instagram, and YouTube (Kemp, 2017). The statistics reveal that social media users in Cameroon constitute a substantial portion of the population, with notable increases in usage from 2021 to 2022.

Considering the diverse purposes users attribute to social media platforms based on the uses and gratification theory, it becomes imperative to explore the varied effects on academic performance and social interactions among students at the University of Yaoundé I. This investigation seeks to discern whether these effects are positive or negative, and further probes into the mediating role of social interactions in shaping the relationship between academic performance and social media usage.

This exploration is crucial, as the consequences of social media's influence on academic and social development at the University of Yaoundé I have broader implications for the future of the entire country. Understanding the dynamics of social media in the educational sphere is vital for fostering a balanced and effective learning environment that aligns with the evolving landscape of technology and communication.

### **Research Objectives**

The general objective of this study is to examine the effects of social media on student's academic performance and social interaction in the University of Yaounde 1.

With Social media use as Independent variable and Student's academic performance as Dependent variable, the specific objectives are;

- To examine the effects of social media on students' academic performance in UY1
- To examine the effects of social media on students' social interactions in UY1
- To evaluate the mediating effect of social interactions, on the use of social media and academic performance.

### **Research questions**

The following research questions will guide this work:

General research question

- What is the effect of social media on student's academic performance and social interactions in the UY1?

The specific research questions are;

- What is the effects of social media on students' academic performance in UY1?
- What is the effects of social media on students' social interactions in UY1?
- What is the mediating effect of social interactions, on social media usage and students' academic performance?

### **Research hypothesis**

Ha1: Social media has an effect of students' academic performance in UY1

Ho1: Social media has no effect of students' academic performance in UY1

Ha2: Social media has an effect of students' social interaction in UY1

Ho2: Social media has no effect of students' social interaction in UY1

Ha3: There is a mediating effect between social interactions, social media and academic performance.

Ho3: There is no mediating effect between social interactions, social media and academic performance.

### Significance of the study

This study which is to examine the effects of social media on student's academic performance and social interactions in the University of Yaounde 1 will be beneficial to the following groups of people; the students of the University of Yaounde 1, the administration of the University of Yaounde 1, Academicians, curriculum planners of higher education, Teachers and Researchers.

### **Scope and limitations**

Geographically, this study was carried in the University of Yaounde 1, Mfoundi Division in the Center Region of Cameroon. It covered four faculties in the main campus of the University of Yaounde 1. This study will be focused on the effects of social media on student's academic performance and social interactions in the University of Yaounde 1 for the 2022/2023 Academic year. It therefore excludes other psychological and or environmental factors that do affect the academic performance of university students generally. The work is also focused on masters students of the University of Yaounde 1.

### **Definition of Keywords**

Academic performance: Academic performance is the knowledge gained which is assessed by marks by a teacher (Abdullah and Narad, 2016). It can also be defined as educational goals set by students and teachers to be achieved over a specific period of time (Abdullah and Narad, 2016). With regards to this study, academic performance refers to the final scores and GPA (Grade point average) obtained by students at the end of each academic year.

**Social media**: According to Wigmore (2020), social media is a collective term for websites and applications which focus on communication, community-based input, interaction, content sharing and collaboration. Forums, microblogging, social networking, social bookmarking, social curation, and wikis are among the different types of social media. Again, social media are interactive digitally-mediated technologies that facilitate the creation or sharing/exchange of information, ideas, career interests, and other forms of expression via virtual communities and networks, (Wigmore, 2020). Within the context of this study, social media refers to digital platforms such as Facebook, Twitter, WhatsApp, etc. which are used for the purpose of communication, learning and information searching.

**Social interactions**: Social interaction is the mutual or reciprocal influence, resulting in the modification of behaviour, exerted through social contact and communication which, in turn, are established by inter-stimulation and response (Gillin & Gillin, 1948). With respect to this study, social interactions refer to the different exchanges that occur between social media users and information from social media.

#### **CHAPTER TWO**

### LITERATURE REVIEW

This literature review covers a variety of previous scientific studies that are related to the main goal of this study, which is to investigate the effects of the use of social media on students' academic performance and social interactions in UY1.

### **Conceptual framework**

The various concepts and objectives that govern this study are reviewed in the subsequent paragraphs, this includes; social media, social media in education, social media use and academic performance, social media use and social interactions, the mediating effect of social interactions on social media and academic performance.

### Social media

A formal definition of the term first requires drawing a line to two related concepts that are frequently named in conjunction with it: Web 2.0 and User Generated Content. Web 2.0 is a term that was first used in 2004 to describe a new way in which software developers and end-users started to utilize the World Wide Web; that is, as a platform where by content and applications are no longer created and published by individuals, but instead are continuously modified by all users in a participatory and collaborative fashion. While Web 2.0 represents the ideological and technological foundation, User Generated Content (UGC) can be seen as the sum of all ways in which people make use of Social Media. The term, which achieved broad popularity in 2005, is usually applied to describe the various forms of media content that are publicly available and created by end-users. According to Kaplan and Haenlein (2010), social media which are internetbased applications are built on the Web 2.0 ideology and technology. Consequently, Boyd and Ellison (2007), asserted that social media are built on web-based facilities that allow for the construction of public or semi-public profiles by individuals or groups of individuals. The following have been identified as the most common social media platforms currently in use, these are; Facebook, Twitter, Whatsapp, YouTube, Wikipedia, LinkedIn, Reddit, Instagram, Pinterest etc

In addition, There are many forms of social media, presented in the table below, which allow users to interact with other media users of their choice.

**Table 1:** Forms of social media

Form of social media	Description
Social networking sites (SNS)	Services in which users set up a profile in order to establish a
	connection with friends or other users, who have similar
	backgrounds or interests. The profile contains a users' personal
	information. SNS provide various ways for users to interact with
	one another. Examples of SNS include Facebook and LinkedIn
Bookmarking sites	Services which allow users to save, search and organize links to
	various Internet resources and websites. Some services will allow
	the tagging of links in order for them to be shared easily as well as
	being searched for. Examples of bookmarking sites are Diigo and
	Delicious
Micro blogging sites	Services which combine SNS and blogging but the messages
	exchanged are limited in terms of size. Users have to subscribe to
	the services. Examples of micro blogging sites include Twitter.
Media sharing sites	Services which allow users to upload and 16 share media such as
	videos and photos as well as allowing users to comment and tag
	media. Examples of media sharing services include YouTube and
	Flickr
Social news sites	Services that allow other users to vote on news articles and links to
	external articles, which are posted by users. The news articles that
	get the most votes are displayed more prominently on the site.
	Examples of social news sites include Digg and Reddit
Blogs and forums	
	Blogs are like online diaries of thoughts, which give other users the
	opportunity to post comments on the blog postings. Forums allow
	registered users to have conversations with other users by post
	messages. Examples of blogging sites include WordPress and
	Blogger.

Source: Forms of social media adapted from Grahl (2012) as cited in Alwagait (2015)

Also, according to the Organisation for Economic Co- operation and Development (OECD, 2007), UGC needs to fulfill three basic requirements in order to be considered as such: first, it needs to be published either on a publicly accessible website or on a social networking site accessible to a selected group of people; second, it needs to show a certain amount of creative effort; and finally, it needs to have been created outside of professional.

Social media is meant to employ mobile and web-based technology to create highly interactive platforms via which individuals and community share, co-create, discuss and modifies usergenerated content, (Kietzmann, Silvestre, McCarthy, & Pitt, 2012). Social media is a phrase being tossed around a lot. It is a website that does not just give you information but interact with you while giving you information. It is a group of internet-based application that allows the creation and exchange of users generated content. Social media is fast changing the public discourse in our societies and setting trends and agendas in topics that range from the environment, education and politics to technology and the entertainment industries (Nami, 2010). It is therefore obvious that the modern reality requires one to stay in touch and keep abreast with the latest news and trends of our time. Users of social networks, in most cases as have been reported, are a representative of the younger generation.

### **Defining social media**

The term "social media" was first coined in the early 2000s to describe online platforms that allow users to create and share content, as well as interact with one another. The term has since evolved to encompass a wide range of digital communication tools, including social networking sites, blogs, microblogging platforms, video-sharing sites, and more.

Etymologically, the term "social media" is a combination of the words "social" and "media". "Social" refers to interactions between people in a community or society, while "media" refers to the various channels of communication that are used to disseminate information.

The word "media" has its roots in the Latin word "medius", meaning "middle". It originally referred to the means by which information was transmitted between two parties, such as a messenger carrying a message between two people. Over time, the term has come to encompass all forms of communication, including print, radio, television, and now digital media. In a lay man understanding, media is seen as any means of information sharing that requires the use of

such media as newspapers, radios, televisions, magazines etc. According to Urdang (2014), media may be seen as those means of communication through which one can be able to pass information across to a large population of persons; these means include the televisions, newspapers, and radios. More so, Webster (2019) referred to media as any medium through which one is able to express, cultivate or convey information. On the other hand, social may be seen as those activities involving human environment and the individuals living and sharing resources together in the environment (Hanks, 2014).

Therefore, the etymological definition of social media could be understood as a form of online communication that allows people to interact and share content with one another using digital platforms and channels.

More so, Webster (2019) defined social as a mean through which interact together for the common good of all; it simply refers to the people or the society in general. From the foregoing, one could refer to social media as any media circulated with the help of social interactions. Basically, social media may be referred to the cybernetic and simulated relationships, among people, organizations, and companies etc., this entails the invention, sharing or exchanging or data in the form of texts, images, and symbols. According to Ahlqvist et al., (2008), it entails the process through which people interact by sharing, creating and exchanging information and ideas through virtual communities and networks.

Social media refers to the means of interaction among people in which they create, share, exchange and comment among themselves in different networks. Andreas and Michael (2010) are of the opinion that social media is a group of internet-based application that builds on the ideological foundation and allows the creation and exchange of users-generated content.

The subsequent paragraphs will throw more light on the uses, benefits and challenges of social media.

### The uses, benefits and challenges of Social Media

### Uses and benefits of social media

Social media has a wide range of uses across different contexts, here are some examples of the various uses of social media, along with citations to support each use:

**Collaborative projects:** Collaborative projects allows for the joint and simultaneous creation of content by many end-users and are, in this sense, probably the most democratic manifestation of UGC. The main idea governing collaborative projects is that the joint effort of many actors leads to a better outcome than any actor could achieve individually, through interactions.

**Personal communication and networking:** Social media platforms like Whatsapp, Facebook, Twitter, and LinkedIn are commonly used for personal communication and networking purposes. These platforms allow users to connect with friends, family, and colleagues, and share personal updates, photos, and messages (Pew Research Center, 2019). Students have class groups and faculty groups where all students, some administrators and teachers are a apart of, to ease communication and networking.

**News and information dissemination:** Social media is increasingly being used as a source of news and information, with many users turning to platforms like Twitter and Facebook to stay up-to-date on current events (Pew Research Center, 2021). Students, teachers and school administrators share vital information about school on social media in the form of flyers, communiques, messages and voice mails.

**Marketing and advertising:** Social media has become a key tool for businesses to reach and engage with their target audience. Platforms like Instagram and TikTok offer businesses the opportunity to create and share visual content that promotes their products or services (Hootsuite, 2021). Advertisements of projects, scholarships and businesses related to education are posted on school social media platorms.

**Customer service and support:** Many businesses also use social media as a means of providing customer service and support. Customers can use platforms like Twitter and Facebook to ask questions, report issues, and receive assistance from company representatives (Forbes, 2020). Students can easily get to their teachers just by sending an email or direct message to them on social media incase they need help with anything, rather than standing for hours to get a physical appointment with the said teacher.

**Political campaigning and advocacy:** Social media has become an important tool for politicians and advocacy groups to communicate with voters and supporters. Platforms like Whatsapp, Twitter and Instagram allow political candidates to share their views and connect with constituents,

while advocacy groups can use social media to raise awareness and mobilize supporters (Pew Research Center, 2019). During the campaigns for the Student government, flyers, pictures and speeches are sent to the different social media forums to reach a greater audience and campaign for votes.

#### Challenges and problems associated with the use of social media

There has arisen a debate on the adverse impact of social media usage on people, particularly adolescents and student communities across the world (Ikezam & Eremie, 2021). In this respect, digital media and social media networking sites have received criticism, and there are many perspectives regarding the effect of social media. The popularity of social media applications and social networking sites has increased precipitously during the last decade (Malita, 2011). Typically, the reason for this rapid increase is that teenagers and college and university students are using social media applications to gain global access. These social media sites, such as Facebook and Twitter, are becoming the craze in our society for everyone these days (Stathopoulou Siamagka & Christodoulides, 2010).

**Encourages laziness:** Today, students are relying increasingly on information and data that is easily accessible on social networking sites and the internet. This is the reason why students' learning skills and research capabilities are decreasing in certain situations, as their engagement with these sites reduces their focus, which causes them to dedicate less time to their studies and results in a decline in their poor academic performance manifesting in the form of low grades, failure in assignment and class test, etc. (Hoffmann & Bublitz, 2017). When group work is given online, it is noticed that not all students participate as compared to if it was given physically. And most of the time, all groups submit the same assignment due to copy and paste.

**Reduces face to face communication:** Typically, as students spend more time on social media, they spend less time socializing face to face or in person with other people, and these habits reduce their communication skills. The wasting of students' time on social media may also cause them to miss deadlines on occasion. As a result, students might not be able to communicate and socialize effectively in person, and it is well known that strong communication skills are a key to success.

**Poor mental and physical health:** Moreover, excessive social media use affects students' mental and physical health. The adverse effects of these social media networking sites outweigh the

positive ones. Thus, these sites have caused potential harm to society. Students become victims of social networks more often than anyone else. This may be because social media is an attractive way for students to avoid boredom while they are studying or searching their course material online, diverting their attention from their work (Bozoglan, 2017).

**Fuels negativity:** Social media platforms have also been criticized for revealing and fueling negativity, which has a net-negative effect on students. For instance, the following social media platforms have been ranked from the most to the least negative based on user evaluations: Twitter, Facebook, Snapchat, and Instagram. Users have described Instagram, in particular, as having a negative effect on people by causing stress and tension on individuals' bodies.

**Poor communication skills:** According to Steven Strogatz of Cornell University, online networking can make it more difficult for people to identify meaningful communication from other diverse interactions or connections created via web-based social networks (Bozoglan, 2017). Such a reduction in the number of significant connections may intimidate individuals, making them fear the development of important interactions and communication.

Also, mixed results have been found in regard to social networking site use in educational settings (Ikezam & Eremie, 2021). Some studies have reported significant evidence concerning the negative relationship between social media and academic performance (Karpinski, Kirschner, Ozer, Mellott, & Ochwo, 2013). Paul, Baker, and Cochran (2012) found that devoting time to social networking sites has a negative impact on academic performance. According to other studies, this negative impact mainly occurs when social networking sites are used in the classroom because multitasking diminishes performance and when the students involved are in their first year of university (Krasilnikov & Smirnova, 2017).

It seems that students who use social media spend less time studying, with an adverse effect on outcomes. Furthermore, some have suggested that social networking sites offer added value in educational settings, facilitating assimilation of this new knowledge on teaching practice and new educational methodologies and theories, and thus creating the conditions necessary for developing new methodologies.

Regardless of the challenges, the main benefits that social media offer in educational settings stem from their value as a tool for information exchange and as a means of socialization and communication (Santoveña-Casal, 2019).Overall, social media has become an integral part of our daily lives especially in education, with a wide range of uses that continue to evolve over time. The subsequent paragraph will throw more lights on social media in education.

### **Social Media in Education**

The push to innovate teaching and learning using social media has been a clear theme in both the early stage research on web technologies represented by blogs and wikis as well as recent research on social networking sites such as Facebook and Twitter. Bradley (2009) and Grosseck (2008) gave emphasis on recognition of higher education and promoting the huge potential brought by web technologies to improve student engagement, college experiences, and pedagogical practices, and has been advocating innovations and changes to stay current with the changed education market. Ajjan & Hartshorne, 2008; Chen & Bryer, 2012; Roblyer, McDaniel, Webb, Herman, & Witty, 2010 indicated several factors and investigated in the context of higher education, faculty use and student engagement on social media and their usage in education.

It showed that, Among these numerous social media platforms, the Facebook, Twitter, Instagram and Whatsapp have been recognized as the ones commonly used by students; in Nigeria for instance, majority of students spend an ample of their time on platforms such as the Facebook, Twitter and Whatsapp while making use of smartphones which is now a common gadgets among them; because of this reason, very many students spend 2 to 3 hours checking activities and updating their profiles on these social networks even at the peril of their educational and career pursuit (Owusu-Acheaw and Larson, 2015). The advancement of social media has taken over almost all spheres of human endeavors despites negative implications. The educational environment is equally not left out of this; people are therefore tempted to claim that that these social applications-social media carries with it the potential to further improve learning and sharing of information among learners and teachers (Ferdig, 2007).

According to West (2012), social media has the ability to close the gap between the learners as the teacher even down a physical distance is existing between them; in essence, it enables learners from all parts of the world to learn and work together without any hindrance(s). Miah (2013) sees social media as a central path through which individuals frequently interact and share ideas despite been far apart. Social media has proven to improve communication skills, social participation and commitment, improve peer support, and ensure the realization of education based on collaborative

strategies; thus, the impacts of social media on communication, learning, research and education in general cannot be overemphasized (Gülbahar Y., et al., 2008). Notwithstanding, despites these benefits of social media, it appears that the negative impacts of it on students is alarming as students tend to abandon their studies in a bid to catch up with the trends and distractions of these platforms such as chatting, texting, gaming etc. (Omachonu and Akanya, 2019). Kabilan (2010) noted that through social media, students learn correct spellings, sentences, pronunciations, and essay writings through the usage of Google.

Mehmood and Taswir (2013) found that social networking sites can become useful instruments in improving correct spellings and writings among students as it offers elasticity in learning, inspires inventive ideas and increases interpersonal interactions among students and instructors. Fodeman and Monroe (2009) pointed out that the usage of Facebook has raised the level of anxiety among students as they appear to become apprehensive about being without their cell phones for a few hours. It has been observed that all over the world, students engage themselves in using social media; spending a quality of their time on the internet by visiting various platforms. This time spent by students on social media has become of great concern to so many people, especially with the increase in the amount of time students spend online; students spend more time usually multi-tasking by visiting several sites and accessing volumes of contents (Kaplan, A. M. and Haenlein; 2010, Rideout, V., Foehr, U., and Roberts, D; 2010). This agrees with the view of Pew Internet and American Life Project that 64 percent of teens on social media visit one or more platforms (Lenhart, M. and Madden, M, 2007).

Also, there are certain social media platforms which are often and commonly used for educational or other purposes among university students which includes; Facebook, Twitter, Instagram, Snapchat, Whatsapp etc. The subsequent paragraphs will throw more lights on that.

### **Facebook and Twitter Use Among University Students**

Many people consider Facebook an important social platform for news because it is easy to use and requires minimal effort to stay updated on news, information, and events (Hermida et al., 2012). Also, the technology available on Facebook gives the audience a vast space to discuss any subject. As a result, Facebook increases audience involvement and engagement in real-time when it comes to communicating with others and seeking information. Another benefit of Facebook is that it allows users to decide what is important and unimportant to them regarding information (Alomari, 2019). Content that is presented through Facebook is generally not created by a professional. A Facebook user can upload any content that in some cases becomes so viral that it is further spread by Fox News, CNN, The New York Times, or any other news platform who may run the story. As a result, university students were and are still attracted by Facebook features, which gives them the opportunity to expose materials (Allcott & Gentzkow, 2017). Since users can present any type of 10 content, this allows for different perspectives or opinions from other users toward a wide array of topics. For instance, social media in general, and Facebook in particular, played an essential role in encouraging Egyptian students from different universities to participate in the Egyptian revolution in early 2011 (Tufekci & Wilson, 2012).

Shortly after the release of Facebook, another powerful social media platform was developed, Twitter, which was launched in 2006, and attracted a vast audience making it one of the most popular social networking platforms (Dijck, 2012). As of July 2009, Twitter had 41 million users in the United States (Kwak, Lee, Park, & Moon, 2010). Five years after its launch date, it reached 180 million monthly users globally and as of 2016, had 320 million users worldwide (Dijck, 2012; Kim & Hastak, 2018). Twitter, like Facebook, is a form of micro-blogging and allows for realtime online dissemination of short content up to 140 characters. Posts can come from both professional and unprofessional sources (Skogerbø & Krumsvik, 2015). The technology used on Twitter is entirely different and, some may argue, easier than other social platforms, including Facebook (Kwak et al., 2010). One reason for this ease is that a relationship between Twitter users does not require acceptance from both sides. As a user, you can be followed by any other user, but you do not have to follow them back in order to let them view your content (Kwak et al., 2010). Some studies indicated that most Twitter users access their profiles through mobile devices (Dijck, 2012). This ease of access explains why the Twitter community expanded quickly compared to other social networking sites. The capability of Twitter in transporting content through its large community is very sophisticated and is considered an advantage. For instance, through Twitter 11 "hashtags", users can keep up with current events in real-time. This was seen when an American student was jailed in Egypt; Twitter quickly spread the news while newspapers were still editing the news to present it later (Kwak et al., 2010). Therefore, real-time access to content and information from social media in general, and Facebook and Twitter in particular, attracted a large portion of society, including university students. Social media platforms enable students to participate in current events that may result in social change. This allows for dialogue between

people, gives people the ability to edit content, and results in society gradually changing their ways in consuming content and communicating with others.

Many studies asserted that there are three main purposes of social media use among university students. The first is a social purpose, which includes chatting with friends and family, sharing content such as pictures or videos, and self-disclosure where students express themselves through status updates. The second is entertainment purposes, where students keep up with celebrities, watch entertaining videos and movies, and play games with other users in real-time (Lin & Sackey, 2015) The third is for an academic purpose, which involves using social media for any work pertaining to educational development inside and outside academic institutions. This can include work that enhances knowledge, allows students to keep in touch with peers or work on group projects, and any work that prevents limiting the learning environment to the classroom (Kolan & Dzandza, 2018).

In addition, while social media may have the potential to promote personal learning environments (PLE) as a promising new pedagogical approach to enhance self-regulated learning (Dabbagh & Kitsantas, 2011), some caution against the use of social media for academic purposes due to the commercially contoured" nature of social media services (Friesen & Lowe, 2011, p. 193) or simply an academic form of a moral panic' without empirical evidence'' (Bennett, Maton, & Kervin, 2008, p. 775). Patel (2010) gives us a visual way of seeing the rise of social media. In his article, he draws and reports that the rise of social media among three target groups (Baby Boomers, Generation Xers, and Millennials) is dramatic. Not only has the usage of these technologies grown, Patel notes that the tenants of learning and work productivity also improve dramatically as we move along the target groups. In fact, this notion of using social media as a learning tool has carried over to the business world. Baird and Fisher (2005) are credited with conducting the first major examination of potential uses of social media in education and identify key advantages that social media platforms provide today's neo-millennial learners. Their study readily points out that today's students have been raised in the "always on" world of interactive media, the Internet, and digital messaging technologies and, therefore, have very different expectations and learning styles than previous generations. This net-centric generation values their ability to use the Web to create a self-paced, customized, on-demand learning path that includes multiple forms of interactive, social, and self-publishing media tools. Hence we can conclude that

many studies have been conducted in the past on social media and its use in education but these studies somehow cannot examine how these social media usage is affecting the academic performance of students.

Also, the push to innovate teaching and learning using social media has been a clear theme in both the early stage research on web technologies represented by blogs and wikis as well as recent research on social networking sites such as Facebook and Twitter. Bradley (2009) and Grosseck (2008) gave emphasis on recognition of higher education and promoting the huge potential brought by web technologies to improve student engagement, college experiences, and pedagogical practices, and has been advocating innovations and changes to stay current with the changed education market. Ajjan & Hartshorne, 2008; Chen & Bryer, 2012; Roblyer, McDaniel, Webb, Herman, & Witty, 2010 indicated several factors and investigated in the context of higher education, faculty use and student engagement on social media and their usage in education.

#### Whatsapp on Academic Performance of Students

Whatsapp is a social media application where audio and audio-visual messages are conveyed between communicants. It is an instantaneous messaging application for smartphones and computers. Whatsapp as a social networking enables users to share text messages, videos, images, and audio messages via Internet connection. It is superior to SMS messaging, which can be very costly when used in foreign countries due to roaming charges; WhatsApp, in contrast, relies on the active Wi-Fi network (Ravizza, Hambrick & Fenn, 2014; Flynn, 2011). WhatsApp is a social network that allows people to access a great deal of information rapidly. The simple operation scheme makes the program accessible to a variety of people of different ages and back-grounds. WhatsApp facilitates interaction with anyone who has a Smartphone, with active internet connection, and has this application installed in the device. A special feature of Whatsapp as a social networking platform is the option to create group and to communicate within its boundaries. The person who created the group becomes the group administrator which enable him to add, erase and control membership. In the case of group chat, Aside from this, all of the participants in the group enjoy equal rights. The software makes it possible for members to receive a notification for each message sent or, alternatively, to mute the in-coming alerts for the duration of 8 hours, a day, or a whole week. The use of WhatsApp as a social networking application enhances online

collaboration and cooperation between online students connected from school or home in a blended mobile lecture and has the following educational value (Chenail, 2014).

#### YouTube on Academic Performance of Students

YouTube is an American online video-sharing platform. YouTube allows users to upload, view, rate, share, add to playlists, report, comment on videos, and subscribe to other users. It offers a wide variety of user-generated and corporate media videos. Available content includes video clips, TV show clips, music videos, short and documentary films, audio recordings, movie trailers, live streams, and other content such as video blogging, short original videos, and educational videos. Most content on YouTube is uploaded by individuals, but media corporations including CBS, the BBC, Vevo, and Hulu offer some of their material via YouTube as part of the YouTube partnership program. Unregistered users can only watch (but not upload) videos on the site, while registered users are also permitted to upload an unlimited number of videos and add comments to videos (Fisher &Taub, 2019; Jidenma, 2011; Haselton & Salinas, 2019).

### **Instagram and Snapchat Use Among University Students**

Instagram is a social networking site that was created by Mike Krieger and Kevin Systrom and was first launched in October 2010 (Waters, 2015). Instagram allows its users to take pictures and short videos, and to apply themes or filters to their content before they are posted on the users' Instagram account. Also, Instagram allows its users to share their content with other social networking sites, such as Facebook and Twitter (Alhabash & Ma, 2017). Instagram can be used on both smartphones, computers, and any device connected to the internet. Since it was launched, Instagram has been gradually obtaining popularity among users. In 2012, the Instagram community reached 300 million people, and in the same year, Facebook bought it for 1 billion dollars (Huang & Su, 2018).

Worldwide, Instagram is the second largest social media platform after Facebook. In 2018, the total number of users reached 700 million, with young adults being the majority of users (Huang & Su, 2018). Also, university students make up a large number of Instagram users (Alhabash & Ma, 2017). In 2019, according to a report conducted by the Pew Research Center, 75 percent of American adults between 18 and 24 years old use Instagram (Perrin & Anderson, 2019). Approximately a year after Instagram was launched, Snapchat was created by Evan Spiegel, Bobby Murphy, and Reggie Brown and was launched in 2011 (Vaterlaus, Barnett, Roche, & Young,

2016). Snapchat, like Instagram, is one of the most popular social networking sites that allows users to send messages to each other. However, with Snapchat, users' messages disappear after they are read. Also, Snapchat's users can share videos and images, but those videos and images also disappear after a short period of time. Snapchat users are able to determine how long, from one to ten seconds, their materials are allowed to be seen by other users.

Also, Snapchat recently announced a new update consisting of a tool called loop, where users can create videos or pictures that can be viewed consistently until users close the content (McCord et al., 2016; Tracy, 2019; Utz, Muscanell, & Khalid, 2015). Essentially, Snapchat was developed to allow users to interact through video messages. Additionally, due to its main feature, which allows users to participate and contact each other by creating short video stories regarding their everyday life, experiences, and any events users wish to share, Snapchat has been appealing to a large amount of people (Vaterlaus et al., 2016). In fact, many studies have emphasized that Snapchat is one of the most heavily used social media platforms among young adults between 18 and 24 years old (Alhabash & Ma, 2017; McCord et al., 2016; Utz et al., 2015; Vaterlaus et al., 2016).

The rapid growth of a social networking site like Snapchat, is due to the fact that Snapchat is attractive to a large number of young adults, including university students in the United States and globally (McCord et al., 2016; Utz et al., 2015).

Regarding Snapchat's effects on users, especially university students, it has been determined that Snapchat, like any other social media platform, has both positive and negative effects on university students (Khan et al., 2019; Mim et al., 2018; Vaterlaus et al., 2016). Advantages of this platform include its ease of accessibility, real-time content dissemination, interaction between users, and much more. On the other hand, spending too much time on a daily basis using social media platforms, particularly Snapchat, may affect university students in terms of focusing on their studies, keeping up with class materials, and affecting their overall academic performance (Al-Eisa et al., 2016; Halboub et al., 2016; Mim et al., 2018). It is significant to study and discuss the use of social media platforms and their effects on university students' academic performance, which is what the following section of this literature review consists of. It contains a detailed explanation regarding the positive and negative effects that can occur on university students as a results of social media use.

Therefore, we can conclude that many studies have been conducted in the past on social media and its use in education but these studies somehow cannot examine how these social media usages is affecting the academic performance of students.

# Social Media use and Academic Performance

Academic performance is a measurement of the scholastic achievements of students. Typically, this measurement is done on a numerical scale, but it can also be displayed with words or letters. Typical ways of measuring academic performance include testing, grade point averages, and graduation rates. (Bell 2021.) Academic performance can be considered to also include activities outside classrooms and tests such as participating in student groups or volunteer organizations or anything other that shows the student as eager to take initiative (Williams 2018). For this study, the GPA (Grade point average) and classroom performance will be the focusing point.

Academic achievement is referred to the way(s) students deal with their studies as well as the actualizations of different tasks assigned to them by their teachers (Kimberly, B., et al., 2009). According to Ward et al., (1996), academic achievement is referred to as the product of education, the extent to which students, teachers or institutions have achieved their educational objectives. Academic achievement can thus be seen as observable and measurable behaviors of an individual within a particular situation. Grade Point Average (GPA) and test results represent students' academic achievement; it is one of the current educational problems of public interest based on poor level of students' academic achievement especially in secondary schools and postsecondary schools (Kolawale, C. and Dele, 2012). Most previous studies on academic achievement of students have focused on factors such as socio-economic background, class environment, gender differences, family educational background and teaching and learning style preferences (Aripin, R., et al.,2008). It has been indicated that social media networks often directly or indirectly necessitate access to information and knowledge attainment; more so, that these networks have influences on student academic achievement (Baldwin ,2007). However, poor academic achievements in the recent times have been traced to technological developments. While technological advancement is gradually gaining dominance in the present society, the study habits of students are also fast vanishing into thin air (Ezema and Ekere, 2009).

The authors affirmed that students now lack the skills of reading and instead spend more hours on electronic media. Browsing the internet, playing with handsets and passing non-stop text messages

seem to be the order of the day; this has made reading books and other pieces of written materials in a quiet or peaceful corner of libraries or homes appear an archaic idea for most school's children and adults. Students' involvement in social media activities such as making new friends and gaining access to relevant information can be channeled towards making improvements in their academic achievement, but this depends on the individual's ability and willingness to utilize the opportunity of coping with academic related stress. Utilizing these opportunities and benefits of social media networks can positively help students improve in their academic pursuits. A student who is able to creatively make waves and enormous progress in the utilization of social media can equally do exploits in his/her academic life if he is able to channel the same energy towards his/her studies (Baldwin et al., 2007). According to Obama (2008), children cannot achieve success in their academics unless their expectations are raised and television sets are turned off. Apuke (2016) postulated that it is a common thing these days for young people to become addicted to social media activities; as a result, they abandon their studies and shift attentions to chatting with friends, even during lectures. Additionally, many students use their phones to engage in activities which appear to be quite distracting most times. However, Bamigboye and Olusesan (2017) stated that social media can be very resourceful to the academic progress of students.

It was reported that an average Nigerian student spends about six to seven hours on internet daily, with some spend more hours doing all night browsing (Ajewole, O.O. and Fasola, O.S, 2012). It has been indicated that social media networks often directly or indirectly necessitate access to information and knowledge attainment; more so, that these networks have influences on student academic achievement (Baldwin, T.T., Bedell, M. D. and Johnson, J.L, 2007). However, poor academic achievements in the recent times have been traced to technological developments. While technological advancement is gradually gaining dominance in the present society, the study habits of students are also fast vanishing into thin air (Ezema. I.J. and Ekere, J.N, 2009). The authors affirmed that students now lack the skills of reading and instead spend more hours on electronic media. Browsing the internet, playing with handsets and passing non-stop text messages seem to be the order of the day; this has made reading books and other pieces of written materials in a quiet or peaceful corner of libraries or homes appear an archaic idea for most school's children and adults. Students' involvement in social media activities such as making new friends and gaining access to relevant information can be channeled towards making improvements in their academic achievement, but this depends on the individual's ability and willingness to utilize the opportunity

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Social media have become very common among students all over the world; this of course includes the schools in Enugu State where students have been seen to attending schools and classes with expensive gadgets like the mobile phones, tablets and iPods etc. with applications, facilities and software that can connect them to the internet and all forms of social media platforms, websites and so on. Evidences have shown both from the results of West African Examination Council (WAEC) of 2014 to 2018 and internal examinations that most students fail accounting. This trend could be attributed to many factors such as misuse of social media as a tool for learning, examination malpractice and environmental factors, among others. It is against this background that this study sought to investigate the influence of social media on student's academic achievement in accounting.

The findings of this study showed that usage of social media by students is high; these social media platforms are being used by students to make new friends, chat with their friends, to upload their photos and videos, to research about their assignments and other educational materials, to stay up to date with latest trends and news, to reach out to their classmates for group assignments, to research about future academic career, and to discuss trending topics like Big Brother Naija, and Champions League. The study revealed that students rarely use social media to reach out to their teachers. These findings corroborate with earlier findings by other researchers. Findings on what students use social media for agreed with the findings of (Manasi, G, 2008), who found that

students use social media to interact with friends, connect with classmates for online study and in discussing serious national issues. In another study carried out in Malaysia by (Agwi, U.C and Ogwueleka, F.N, 2018), its findings are in disagreement with the findings of this study. The author found that a minority of students (26%) use social media for academic purposes. The findings of this study revealed that frequency of social media usage has an influence on students' achievement in Accounting. Students who use social media for 2 to 4 hours daily had the highest mean achievement in Accounting, followed by those who use social media between 0 to 2 hours. Those who use social media between 4 to 6 hours and above 6 hours had mean academic achievement of 69.50 and 70.85 respectively. This finding could be explained by the assertions made by (Kabilan et al., ;2010, Mehmood and Taswir; 2013) which appear to be in agreement with the findings of the present study.

Kabilan (2010) found that students who use social media learn correct spelling, sentence, pronunciation, and essay writing by Googling the words into the nets. Mehmood and Taswir (2013) found that social media are useful in improving correct spelling and writing among students by offering elasticity in learning, inspiring inventive ideas and increasing interpersonal interaction among students and instructors. In disagreement with the findings of this study, Ezeji (2018) revealed that the rate of social media usage among students were very high and had a negative influence on the students.

In conclusion, The findings of this present study revealed that senior secondary school students use social media to make new friends, chat with friends, upload their photos and videos, research about their assignments and other educational materials, stay up to date with latest trends and news, reach out to their classmates for group assignments, research about future academic career, and discuss trending topics like Big Brother Naija, and Champions League. The students spend two to four hours daily on social media; access various social media with the ones being frequently used to be Facebook, Whatsapp & YouTube. Frequency of social media usage has influences on students' achievement in Accounting, with female students having higher mean achievement scores than male students. There is no significant influence of the frequency of social media usage by students on their mean academic achievement in Accounting based on frequency of how they use social media. The second hypothesis showed that there is a significant influence of gender on students'

mean academic achievement in Accounting. Therefore, male and female students differ in their academic achievement. It is pertinent that these students do not abuse the good uses of social media, while parents and teachers encourage them to continue consuming the appropriate contents online. Teachers can also upload educational contents online in the forms of blogs and articles and have students read them in their spare times, online. The limitation encountered while conducting this study was the issue of respondents faking responses or distorting the required information by giving responses that are not entirely true, which may have slightly affected the findings of the study.

Additionally, a study titled: Impact of using social media on academic performance of students at graduate level: evidence from Pakistan by Kausar and Awan (2019) with the aim to find out the impact of using social media on academic performance of students at graduate level. The population of this study was all male and female graduate (final year) students of post graduate colleges of district Vehari. 300 students were selected as a sample of study randomly. A questionnaire comprised 40 statements based on 5-points Likert scale was developed for data collection. However, with more and more students being preoccupied with social media networks and technological social lives, how will this affect their studies? It is estimated that even those students who do graduate high school, one out of three does not have possess the knowledge and skills that would lead him or her to the next level, such as college or an advanced trade school (Bowen, 2008). Literacy has also taken a dive in the past decade, which has caused many educators to question what can be done to help students improve their reading, writing, speaking, and thinking- all of the most basic skills for a successful future (Wise, 2009). As one researcher stated, "Literacy is, in reality, the cornerstone of student achievement, for any student, in any grade" (Wise, 2009, 373). The question that many school professionals have with regards to communication is whether or not a tertiary institution student is able to follow school curriculum in courses like English or Language Arts (Williams, 2008). Also, will it be possible to teach them without the use of multi-tasking and using new forms of technology. The improved usage of Websites has become a worldwide phenomenon for quite some time. What began out as being a hobby for several computer literate people has converted to a social norm and existence-style for individuals from around the globe (Nicole Ellison, 2007). Teens and teenagers have especially recognized these internet sites to be able to contact their peers, share information, reinvent their personas, and showcase their social lives Nicole Ellison, (2007). While using the increase of technology helpful for getting together with others along with the recognition on the internet, Internet sites are now being an activity that's done mainly on the web, with Websites Vaughn, Coyle (2008).

According to Khan U (2009), social media users often time experience poor performance academically. Similarly, Englander, Terregrossa & Wang (2010) posit that social media is negatively associated with academic performance of student and is a lot more momentous than its advantages. Internet addiction consequently gave rise in internet usage within the last couple of decades. Nalwa & Anand (2003) contended that addicted users prefer using internet setting back their personal and professional responsibilities which ultimately leads to poor academic performance. In the same vein, Karpinski (2009) pointed out that social media users devoted lesser time to their studies in comparison to nonusers did and subsequently had lower GPAs. Karpinski & Duberstein. (2009). Also mentioned that among various unique distractions of every single generation, Social media remains a major distraction of current generation. In response to the question of how much time adolescents spend on social network websites, it is significant to note that there are other parents who are in favour of these sites (Bryant, Sanders-Jackson, & Smallwood, 2006). Some parents are concerned about their children's social lives and are grateful that they may have an outlet for their potential depression and loneliness (Bryant, Sanders-Jackson, & Smallwood, 2006). In a study completed in 2006, almost 35% of parents of adolescents reported that they feel that communication with others, in any form, is better than having no communication at all, and therefore are fully supportive of their child's internet use (Bryant, Sanders-Jackson, & Smallwood, 2006).

In conclusion, Majority of the students presently are victims of using social media whether urban or rural and whether males or females. Using social media starts at early ages now even the students at the age of pre-primary classes are use social media without knowing its advantages and disadvantages. Majority of the students favored that using social media affect their performance. There are a small percentage of respondent who get benefits from use of social media but majority of the respondents is affected negatively. Out of the social media respondents, those who used social media in excess were more negatively affected from its affects. The result of this study showed that, though social media have negative effects on teenagers such as lack of privacy, distracting students from their academic work, taking most of their productive time, and such like, they also have benefits and can be used appropriately. For instance, students can form online communities in order to plan for a project, have group discussions about class material, or use the social media as a way to keep in contact when a student who has been absent needs to be updated on current academic information. It is concluded that social media platform has a significant impact on students' academic performance of Pakistani graduate students. Nevertheless, among the six variables used in this research, time appropriateness and health addiction has a stronger significant influence on students' academic performance. This is because time management plays an essential role in determining the success or failure of an individual. Thus students who lack time management can easily fall prey to the negative impact which social media platforms present to its uses.

Likewise, health addiction, students who are engrossed with social media platforms ends up skipping their meals which has a health impact on them. Such students become malnourished and could possibly fall ill which is will directly have an impact on students. Also, the nature of usage and friend-people connection has an impact also on the performance of students but not as impactful as the aforementioned variable. Finally, time duration and security/privacy problems have minimal or no significant influence on students' academic performance. The first independent variable influencing the academic performance of students, that is, social media participation was negatively related with students' outcome, while the other independent variables were positively related with students' outcome. The results of this study suggest that lecturers should come up with a template on how their students can maximize the benefits of Social media, that school management should incorporate rules and regulations on the use of the social media in the school and, that the government should put in place adequate control measures to regulate their use among students and lecturers. Hence, it can be concluded that male students are aware of the problems related to privacy of their personal data with the usage of social media. The female students are more concerned about their grades than male students. The usage of social media does not significantly impact on the students' real social life and grades as well. As a matter of fact, this study showed that social media can prove to be a helpful research tool for students and can help them in their studies.

However, majority of the students spend at least 2 to 5 hours on social media daily. When students were asked about whether using some kind of social networking is essential for today's life or not,

more than 80% of the students agreed. Social media addiction can be an issue that needs to be addressed somehow. The study indicated that automatic software program that will shut down after a certain time, should be used to control its utilization by students. Teachers who need to use social media in their courses to upgrade students learning capacity should be organized to empower students and make them active individuals in the learning process. The thought that students know how to use social media appropriately may act as a hindrance for those students who may require closer supervision. An e-learning system can play a very important role for students in order to cooperate and work together through the social media channel. Overall, it can be concluded that, if appropriately used, the use of social media can prove to be a very useful source of learning, sharing and healthy activities.

### Usage of social media and social interactions

Social interaction is the mutual or reciprocal influence, resulting in the modification of behaviour, exerted through social contact and communication which, in turn, are established by interstimulation and response (Gillin & Gillin, 1948).

The nature of the process of social networking sites is that audiences can express their satisfaction by interacting with the media and with each other (Alomari, 2019). Additionally, social platforms may influence individuals and change their viewpoint toward a multitude of topics including societal concepts. One of the main reasons people use social networking sites is to maintain relationships and to easily share information with a large audience (Chan, 2016). Simply, the existence of social platforms depends on audience interactivity, as can be seen in the most used platforms, Facebook and Twitter (Alomari, 2019). It has been determined that scientific discussions with others and peers enriches their insights academically and is an effective opportunity to broaden vocabulary. Additionally, using social media as a means of communication in the student community helps enhance writing skills, decreases spelling and grammatical mistakes, and enhances knowledge by increasing exposure to a variety of content (Mushtaq, 2018). Additionally, social media use by students makes the learning process continuous and not limited to a specific time of day. It also does not limit the sources of learning nor does it specify the nature of how students learn. In other words, social media in the academic environment expands the traditional set of learning (Kolan & Dzandza, 2018). Another advantage of using of social media is that it can overcome students' academic frustration. For instance, students that have academic issues can meet over social media and discuss any academic matter (Mushtaq, 2018).

Using social media for academic purposes, including disseminating knowledge to student's peers, is a common reason for use. However, there appeared to be different purposes depending on the student and their needs (Kolan & Dzandza, 2018). The main factor that plays a role on the influence of social media is time management. It has been reported that students who manage their time and use social media reasonably most likely have a higher average GPA than those who do not (Mushtaq, 2018).

According to Soekanto (2012), social interaction is a phenomenon of dynamic social relationships between one person and another, one with another group, and groups with other groups. Many teenagers today tend to pla y social media without realizing that there will be no more social interaction between them if they are enslaved continuously by social media.

According to Neil Postman, technology gives rise to a technopoly culture, a time when people deify technology and technology to regulate all human life (Straubhaar et al. 2012). According to Broom & Selznick (1961) in Honigmann (1964), social interaction is a relationship with the awareness of other people around us and responding to others. Broom and Selznic (1961) say, that social interaction is based on the existence of "awareness of other people." However, perhaps the issue of 'awareness' itself has begun to disappear in society, especially teenagers, because social media has been too spoiled (Honigmann 1964). Budyatna (2005) in Dillow et al. (2006) suggest that the best form of social interaction is the transactional, dynamic, and reciprocal response between the two communicating parties. Budyatna (2005) in Dillow et al. (2006) also explained that the emergence of technology, such as mobile phones, which have many social media features, had influenced the transactional process. Therefore, adolescents need social interaction with each other, because if this teenager does not interact. Humans will always live together, whether they avoid or not avoid, humans will always be related, and always interact with other humans. Teenagers, most of whom are students and college students, are expected to use social media less often and interact more directly with others. If teenagers can also filter whatever is on social media.

# The mediating effect of social interaction on social media and academic performance.

Although previous studies determined the correlation between social media and GPA, they concluded that social media affects students' academic performance based on whether the students

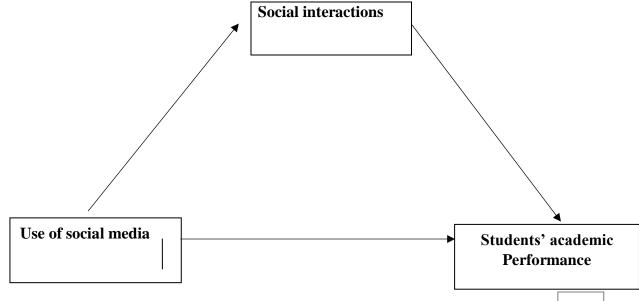
have a social media account and the time spent on social media (Nagesh & Naveen, 2017). Some studies even measured the difference between a student's GPA before a social media account existed and after the student created an account on social media platforms (Larson & Acheaw, 2015; Lin & Sackey, 2015; Sutherland et al., 2018). While all of these variables are important, they neglected the fact that there are many other variables which this study addresses. These variables play a significant role in terms of determining whether there is a correlation between social media use and academic performance. Particularly, this study has determined three major independent variables that are the daily time spent on social media, motives of social media use, and the purposes of social media use among university students. Furthermore, the purpose of use, as an independent variable, consists of three categories that will be investigated in this study using a Likert scale.

The first category includes social purpose, where students use social media to improve their social life and maintain relationships with friends and family. The second category is for entertainment purposes, where 21 students play online games or watch movies to keep themselves entertained. The third category is for academic purposes, where students engage in class discussions with peers and instructors through social media. More concepts regarding these three categories will be described in more detail in the methodology chapter of this study. Regarding the motives as independent variables, It has been pointed out that in addition to the purposes of social media use, there are motives and gratifications that social media users may obtain when utilizing social media platforms (Ismail, 2003; Shatli & Marahi, 2015; West & Turner, 2014). These motives can be sorted into two essential categories. The first category consists of motives called instrumental motives, where social media users utilize social sites such as Facebook, Twitter, Instagram, and Snapchat to obtain beneficial outcomes from their social media use. The second category consists of motives called ritualized motives, where social media users utilize a variety of social media platforms merely because they have been exposed to social media. In other words, social media utilization has become a part of their routine. In fact, users that use social media for ritualized motives essentially do not benefit (Ismail, 2003; Shatli & Marahi, 2015; West & Turner, 2014). From this standpoint, the present study measures the aforementioned social media use motives among university students to investigate whether there is a correlation between motives of social media use and students' academic performance. It has been determined that there is a correlation between the aforementioned motives and university students' use of social media. Particularly,

studies have shown that using social media for different motives forecasts which social media platform students tend to use (Kircaburun, Alhabash, Tosuntaş, & Griffiths, 2018).

The significance of this study in the current work is to emphasize that there is a correlation between instrumental and ritualized motives and the usage of social media. The present study furthers the scope by examining whether there is a correlation between students' academic performance and the motives behind students use of social media as independent variables. Generally, students' academic performance plays a significant role in determining a student's future. It can also provide a reasonable reflection of the extent of a student's understanding of acquired knowledge throughout their university years. Therefore, many students are at some point concerned about their academic performance. As a result, this study is significant as it can provide an understanding of the elements that can affect academic performance. As previously mentioned, studies have emphasized one aspect of the relationship that exists between social media use and university students' academic performance (Nagesh & Naveen, 2017). The primary goal of this study is to determine which social media platform is accessed the most by Arkansas State University students, how students use social media, why students use social media, and what are the possible effects on students' academic performance. As was previously covered in the literature review, there are three main reasons students use social media: social, entertainment, and academic (Mugahed & Shahizan, 2016; Sutherland et al., 2018). These three main purposes were then aligned with the uses and gratification theory where it indicates that audiences use social media to meet certain needs.

# **Conceptual diagram**



# **Theoretical framework**

The two main theories guiding this work are the Uses and gratification theory and the theory of Socio-constructivism.

The uses and gratification theory has five essential assumptions. The first is that the audience is active in the process of mass communication, which means that individuals utilize social media platforms to meet their needs. In other words, the audience's activeness can affect social media content because the audience seeks to satisfy needs and specific goals from the use of media. In the case of our study, students own social media accounts and are actively creating content or interacting with created content and other students/ teachers.

Secondly, the desire of satisfying specific needs and choosing specific media platforms is determined by personal differences between individuals. Simply, an individual's decision of which media platform they use is selective and is strongly linked to their motivations and needs. Additionally, their use of media might embody their perspectives and goals. In the case of the students of the students of UY1, most of the social media platforms used by the school for educational purposes are recommended by the different faculty heads based on their specific needs and goals, for example Google classroom is used by the Faculty of education, this is a platform which does not actually have an interface for all the types of interactions especially student-students and student-teacher interactions. Some other faculties use Zoom, whatsapp etc. for their learning and evaluation.

Thirdly, the audience is capable of determining its needs and motivations, hence, it exposes the media that satisfies its needs. Clearly, this assumption indicates that the audience's existing motivations are central pillar that directs their use of social media, which makes the audience's preference predetermined. The different faculties in the UY1 decide on the most suitable social media platform to use depending on their needs and motivations.

Also, the fourth is that, individuals determine and use media platforms; media platforms do not determine the audience. This idea determined the relationship between media influence on audience and vice versa. In the current technological age, this means that the audience is capable of preventing exposure to media that does not correspond with their interests. Different platforms have different uses and this is taken into consideration when deciding on which social media to use for learning and evaluation.

Fifth, the cultural values in a society can be extracted from the audience's usage of media; they cannot be extracted from the messages introduced by media. In other words, the audience provides a coherent understanding of the differences between individuals based on their use of certain media. For instance, individuals' activeness on social media platforms varies from one to another based on several factors, such as the time and the type of media content (Ismail, 2003; Katz et al., 1973; Shatli & Marahi, 2015; Weiyan, 2015; West & Turner, 2014). By applying the aforementioned assumptions on social media technology, the theory provides a significant interpretation of why individuals tend to prefer a specific platform at the expense of others. In other words, the uses and gratification theory claims that people use social media to acquire particular materials to meet certain needs.

Those needs can be categorized into five categories. The first is cognitive needs, where users are able to acquire information and knowledge. Social media gives students access to information from the internet, teachers and friends.

The second is affective needs, which includes the emotions, pleasure, and the feelings that social media users seek to satisfy. Learning and interactions on social media allows students to express themselves and share their feeling and experiences. Also, some applications are used for interactive evaluation and learning, for example Quizzes.

The third is personal integrative needs, where the audience aims to enhance credibility and selfstatus. Students use social media to carryout personal learning and do research on new topics or areas where thy face difficulties. This helps them prepare for the next lesson and do assignments.

The fourth is social interactive needs, which is concerned with users' social life, particularly their interactions with family and friends. Students discuss about real life experiences with one another and teachers to help solve problems especially school related problems, some share educative pictures and videos for entertainment.

The fifth is tension release needs, which includes escapism and diversion. After long hours of studies, students come to relax on social media to distress.

In fact, all the previous mentioned categories of needs can vary from one person to another or between societies. The uses and gratification theory also states that when users decide another platform suits their needs better, they will readily change their platform of use (Basilisco & Cha, 2015; Ismail, 2003; Ruggiero, 2000; Shatli & Marahi, 2015; West & Turner, 2014). Previous studies have been trying to define audience needs in terms of why they use social media. Recently, most social media studies have incorporated uses and gratification theory (UGT) to measure intention to continue using the social media (Al-Jabri et al., 2015; Hsiao et al., 2015).

Earlier studies have revealed that different gratifications, such as social gratifications, content gratifications, and hedonic gratifications are the driving forces in predicting the behavioral intentions of users. Moreover, previous studies have examined that habit (Limayem et al., 2007; Woisetschlager et al., 2011; Hsiao et al., 2015) and subjective norm (Cheung and Lee, 2010; Choi and Chung, 2013) play a vital role in the formation of usage intention. Indeed, few researchers have discovered separately the effects of UGT, habit and subjective norm on usage intention (Al-Jabri et al., 2015; Gan et al., 2017). Some studies claim that people use social media for social reasons including connecting with friends and family, building new friendships with others, and initiating conversations about specific matters. Others also use social media for entertainment purposes such as playing online games, watching videos, and keeping up with new technologies (Basilisco & Cha, 2015; Shirazi, 2013). Also, social media can be used to meet educational needs. This is found particularly among university students. These students may use social media platforms for a variety of reasons from seeking information to academic growth.

According to numerous studies, there is a positive correlation between using social media for academic purposes and student academic performance (Boateng & Amankwaa, 2016; Kolan & Dzandza, 2018). This makes the uses and gratification theory's explanation significant as it provides a sense of why students utilize social media. Furthermore, there are two essential forms of motivations and gratifications that users seek to obtain. The first is instrumental motives, where audiences get exposed to media or use social media platforms for self-seeking purposes. This can include acquiring general knowledge and experiences, seeking news and information, socializing with others, affiliating with groups that correspond with the users' point of view, and any beneficial motive that audiences obtain from media. The second type of motivation is ritualized motives, where audiences aim to fulfill their free time as a way to avoid being bored, to relax, and for entertainment purposes. Audiences obtain from using media (Ismail, 2003; Shatli & Marahi, 2015). In other words, ritualized motives are the opposite of instrumental motives. Particularly, in

the case of ritualized motives, the audience does not obtain knowledge or experiences when using social media, but rather they use it as part of the daily routine.

All the aforementioned purposes were included within the uses and gratifications' explanation of the needs. However, the uses and gratification theory does not describe the impact of social media use on the aforementioned categories of students. Simply, the theory states that students use social media for specific needs, however the effect of serving those needs was not covered in the theory's assumptions.

Additionally, although several previous studies have focused on different aspects pertaining to social media traits, features, nature of use, and the possible obtained gratifications, a significant aspect that they did not specify includes the factors that might play a significant role in affecting the academic performance of students. These can include the time spent on social media, motives of use, and purposes of use and whether these factors have a direct correlation with students' academic performance (Al-Rahmi et al., 2015; Kolan & Dzandza, 2018; Mugahed & Shahizan, 2016; Nagesh & Naveen, 2017; Said et al., 2017; Sutherland et al., 2018). However, these previous studies helped the researcher to determine the problem of the study, the inquiries that should be asked to measure the objectives of the study and provided a base in formulating and creating the research questions and hypotheses.

An extraction appears to be that the negative effects that occur as a result of social media use are due to the purpose and time of social media being accessed. In this study, the investigation focuses on this relationship by concentrating on several factors and variables, where student academic performance, the dependent variable, is defined as student GPA. Also, the variables to study social media use consist of a variety of independent variables such as the time spent on social media, the motives of social media use, and the purposes of use, where the concepts of social, entertainment, and academic are measured using the Likert scale as it will be explained in the methodology of this study.

The theory of Socio-constructivism by Vigotsky can be used to analyze the use of social media technology for community building. Social constructionists believe that the world is shaped by the dialogue and discourse we have with one another. Social networking tools like wikis and blogs can help to build community through dialogue and conversation, selectively making sense of past and present experiences. According to social constructionist theory, our understanding of the world

arises from our own shared construction of the world. Daily social interaction and relationships are the source of what is true for us. People who are curious about the lives of their peers regularly use social media like Whatsapp and Facebook to create a shared worldview.

Given the centrality of culture to human life (Shuter, 1990; Vygotsky, 1978) and its role in mediated communication and learning, we searched for a definition of culture that would be appropriate for Web 2.0 social networking environments. We observe that online social networking is leading to the development of culture in its own, setting trends and new methods of teaching, learning and evaluation. Very often those who communicate online identify with multiple frames of reference and often subscribe to "third" or hybrid identities that are themselves fostered by the cultural flows facilitated by the Internet. Therefore, we adopted the definition of "idioculture" developed by Gary Alan Fine and cited by Cole and Engestrom (2007) as a functional definition of Web 2.0 culture. An idioculture is a system of knowledge, beliefs, behaviors, and customs shared by members of an interacting group to which members can refer and that serve as the basis of further interaction. Members recognize that they share experiences, and these experiences can be referred to with the expectation they will be understood by other members, thus being used to construct a reality for the participants. (Fine, 1987, p. 125, cited in Cole & Engestrom, 2007).

### Zone of proximal development (ZPD)

Social media tools mediate between the knowledge of the individual and their contribution to knowledge building within the community. Learning to navigate an online social networking site challenges the novice and creates a ZPD: "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, Citation1978, p. 86). In an online environment, the ZPD is often scaffolded by assignments, exposee, group works and tutorials and a help option that guides the user in correct navigation and procedures. Expert knowledge is situated within the social media educational environment through help tools, tutorials, and interaction between participants of the network. Student-student interactions as well as instructor-to-student interactions became a key element. Students learn better when they develop their own knowledge, as a group or individually and with the guidance of an instructor which is why in the UY1, evaluations entails attendance, classroom

and online participation, cumulative assessment marks, examination marks, internship marks and/or project writing for most final year students which all sum up to reflect the academic performance of students.

### **Empirical review**

In this section, studies related to our topic "the effects of social media on student's academic performance and social interactions in the UY1" are reviewed and looked into. The subsequent paragraphs will throw more light.

In the 2016 study, "The Impact of Social Media on Student Academic Life in Higher Education" by Afua and Raymond, ten university students were asked if they believe that social media use enhances their learning. Most of the sample answered yes and indicated that social media platforms such as Facebook and WhatsApp are used in their classes including in their schedules, discussions, and assignments. They also stated that they use these platforms to receive and send information to both instructors and peers. This interaction is thought to increase retention. Specifically, one of the students pointed out that they cannot retain class content unless this content is discussed with others, which is primarily achieved through social media. In other words, some students do not have the ability to retain classroom information unless these students discuss this information with other students through social media. As a result, social media sites are considered a tool to improve learning capabilities (Boateng & Amankwaa, 2016).

Furthermore, Al-Rahmi, Othman, and Yusuf (2015) indicated that the role of social media among students is not only a crossroads to transfer or pass information, but 19 it also creates a learning environment. This enables students to cooperate through discussions with peers, share knowledge, and enhance their learning skills (Al-Rahmi et al., 2015). They also determined that the capability of social media to contribute to academic environments is more effective than other programs. This can be seen in internet web programs that are used in collaborative academic learning among university students. For instance, evidence was found that using social media in integrative assignments leads to higher levels of acquiring knowledge. Although this fact is integral to the study topic, it is out of the scope of this study's instrument (Al-Rahmi et al., 2015). Social media use in the academic field has been prominent since it was first initiated. There are numerous studies that emphasize the variety of benefits university students gain when using social media (Mushtaq, 2018; Nagesh & Naveen, 2017; Russo et al., 2015). It has been determined that scientific

discussions with others and peers enriches their insights academically and is an effective opportunity to broaden vocabulary. Additionally, using social media as a means of communication in the student community helps enhance writing skills, decreases spelling and grammatical mistakes, and enhances knowledge by increasing exposure to a variety of content (Mushtaq, 2018). Additionally, social media use by students makes the learning process continuous and not limited to a specific time of day. It also does not limit the sources of learning nor does it specify the nature of how students learn. In other words, social media in the academic environment expands the traditional set of learning (Kolan & Dzandza, 2018). Another advantage of using of social media is that it can overcome students' academic frustration. For instance, students that have academic issues can meet over social media and discuss any academic matter (Mushtaq, 2018).

Using social media for academic purposes, including disseminating knowledge to student's peers, is a common reason for use. However, there appeared to be different purposes depending on the student and their needs (Kolan & Dzandza, 2018). The main factor that plays a role on the influence of social media is time management. It has been reported that students who manage their time and use social media reasonably most likely have a higher average GPA than those who do not (Mushtaq, 2018).

The findings further revealed that nursing students believed that they acquired increased knowledge and skills through simple interactions with their colleagues. Thalluri and Penman (2015) reported results from nursing students who believed that, through social media, collaboration becomes easier and facilitates rapid interaction and communication. Further, Ferguson et al. (2016) reported that nursing students can receive instant feedback on their work through social media platforms. Based on these findings, social media appears to provide a simple, freely accessible and friendly environment that promotes social interaction and an exchange of ideas and knowledge. This, in turn, develops student engagement through learning outside of the classroom environment.

A study was carried out by Owusu-Acheaw (2016) on "The Use of social media and its impact on academic performance of Tertiary Institution Students: A Study of Students of Koforidua Polytechnic, Ghana". The study sought to assess students' use of social media and its effect on academic performance of tertiary institutions students in Ghana with a focus on Koforidua

Polytechnic students. The survey method and questionnaires were used to solicit data and information from a sample of students of Koforidua Polytechnic during lecture hours of the second semester of 2013/14 academic year. Out of one thousand five hundred and seventy-eight copies of the questionnaire distributed, one thousand five hundred and eight were retrieved which represented a response rate of 95.5 %. The study revealed that majority of the respondents had mobile phones which also had Internet facility on them and had knowledge of the existence of many media sites. The study further confirmed that most of the respondents visit their social media sites using their phones and spend between thirty minutes to three hours per day. In addition, the study revealed that the use of social media sites had affected academic performance of the respondents negatively and that there was direct relationship between the use of social media sites and students' focus on academic tasks with consequences on their academic performance.

More to that, a research on The value of social media use in improving nursing students' engagement: A systematic review by M. Almutairi et al., (2022) with the aim, to investigate the impact of social media use in relation to student engagement in nursing education. This study revealed that, using social media to support nursing students' learning has positive benefits in terms of promoting several aspects of their engagement, such as rapid interaction and communication. This systematic review aimed to evaluate the potential impact of social media use on nursing students' engagement with their courses and aimed to use the findings to inform further efforts to improve engagement, particularly during situations such as the COVID-19 pandemic, which has required greater use of online learning (Khalil et al., 2020). This review found that social media use as a pedagogical tool can provide valuable benefits in supporting students' engagement in nursing education. The main overarching theme across most of the reviewed studies was communication and interaction. Several studies supported this finding. For example, Chen et al. (2009), Eid and Al-Jabri (2016) and Ansari and Khan (2020) demonstrated that dynamic interaction and online knowledge-sharing behaviours through social media networks have had a significant impact on the efficacy of collaborative learning and on fostering students' engagement with their courses.

Prescott et al. (2013) demonstrated a similar finding by exploring the views of academic educators regarding the use of Facebook as an educational tool. They reported that Facebook use increased communication between students and educators and enhanced students' experiences of

participation and collaborative learning, particularly in course content discussions beyond the classroom environment. This review also found that communication and sharing experiences with peers through social media can potentially decrease students' stress levels and enhance self-efficacy around success in their studies: Ferguson et al. (2016), Stephens and Gunther (2016) and

Tower et al. (2015) indicated that Facebook was an innovative platform for students' learning and was instrumental in relieving students' stress, especially in anticipation of upcoming assessments and exams. However, this finding is in contrast with studies that suggested that social media is associated with high stress in nursing education and referred to the pressures that arise from the amount of shared information and the images or identities presented on social media sites (Aydogan and Buyukyilmaz, 2017; Stephens and Gunther, 2016). Moreover, evidence from this review shows that social media use among nursing students can contribute to a positive online learning community. This is supported by studies illustrating that the evolution of social media has positively affected the field of nursing education by creating a virtual learning environment and improving collaboration and teamwork without the barriers of time and location (Imran et al., 2019; Ventola, 2014).

Alsaqri (2018) demonstrated that the positive use of online networking may enhance studying habits in the digital age. Jones et al. (2016) stated that students were able to link to online patient organisations and online nursing communities. Students' use of social media as an innovative approach was emphasised by Tuominen et al. (2014), who indicated that using these tools provides a natural channel for engaging in conversation and sharing materials used in teaching, such as videos. This approach allows students to have a favourable online community for connecting and collaborating nationally and internationally, which can transform the methods of teaching.

In a study carried out by Ikezam and Eremie (2021), with purpose, to investigate the Influence of Social Media on Academic Performance of Senior Secondary School Students in Rivers State: Implementations for counselling. The specific objectives of the study were to: Determine the influence of Facebook on academic performance of senior secondary school students in Rivers State, determine the influence of Whatsapp on academic performance of senior secondary school students school students in Rivers State. In this light, social media engages students and have to be examined as entrepreneurs of understanding. The medium of internet is marketing with increase

in its programs. The interactive character of online conditions has extended with social networking. Hooking up through social networking began as being a niche activity, though time it's a phenomenon. The web sites are employed in many ways like developing metropolitan areas, speaking, blogging etc. Additionally different institutions even nowadays are developing groups on several Websites (Saba in Osharive 2015). Social media has a positive influence on education, helping students improve their academic performance. From helping students complete their assignments, get to grips with intricate educational concepts, prepare for quizzes and exams, to improving their practical skills and finding the right career opportunities, social media is playing a vital role in helping students stay on top of their studies. The use of social media channels like Facebook, Twitter, Instagram, YouTube is highly beneficial for students as these channels allow them to stay up-to-date with the latest happening in their fields and, unearth cutting-edge researches (www.windsor.edu; Yunlok, 2014).

In a study carried out by Anna Yohanna (2020) on the influence of social media on social interactions among students, which seek to investigate the positive and negative impacts of social media on the social interactions of its users. The study stipulated that, social media's role has become part of human's life, such as the scope of education, both academically and as a chat material for teenagers. It is undeniable, and social media has a considerable influence on someone. Someone who is initially small can become significant because of social media, and vice versa (Putri et al. 2016). Various kinds of technology created by humans have a function to facilitate human life itself. Some use social media when they need entertainment. Someone who has these feelings usually uses social media to deal with the loneliness experienced due to a lack of direct communication with others (Rosy 2018).

A study by Drakel et al. (2018) shows that social media influences social interaction among FISPOL students of Sam Ratulangi University. Drakel et al. (2018) show that students are more focused on social media when they are in the teaching and learning process, and when they are outside the classroom, there is almost no communication between students. This phenomenon shows that students have unconsciously faced social media's swift influence that can hinder social interaction. Based on this, researchers are interested in researching social media's influence on social interaction and its impact on students of the Faculty of Social and Political Sciences, Universitas Airlangga. Based on the interview results, it can be seen that social media has both

positive and negative impacts on male students. The positive impact that students feel when they use social media is that social media helps them find out the latest information and quickly, get the latest knowledge, communicate with other people more smoothly, and give them pleasure when they are in their spare time. Although it has many positive impacts on users, the male informants above also mentioned the negative impact of social media. For example, it keeps people close, wasting time, forgetting to pray, and becoming a gathering place for radicalism to terrorism. Meanwhile, female informants' opinions from the Faculty of Social and Political Sciences, Universitas Airlangga are as follows.

Based on interviews with informants who are male and female students, it can be seen that social media has influenced their social interactions. The informants also argued about the attitudes students should take so as not to lead to these negative influences. The following are the results of interviews with informants. From the results of the interview, it can be seen that one important thing that students must have in order not to fall into the negative influence of social media is to be able to control themselves and their minds so as not to experience addiction to social media.

In the research of Demetrovics et al. (2008), that often use of the internet or social media can lead to decreased performance at work, sleep irregularly, decreased appetite, and a reduced interest in social interaction with the surrounding environment. Besides, playing social media also causes an addictive effect. Addiction is the behavior of a person who cannot control his desires and negatively impacts himself (Yuwanto 2013). In Leung's (2004) research, social media addiction is part of managing time. Internet addicts or social media do not realize that they are addicted and do not want to be called internet addicts because they do not feel they are (Widiana et al. 2004). Besides addiction, social media also can change a person's attitude or viewpoint on something caused by irresponsible individuals. Social media can also be the source of all the crimes that have occurred recently. Not a few crimes are committed by social media actors today, for example, hoaxes. Hoaxes are attempts by fraudsters who already know that the news is not valid but are still shared with readers or listeners to deceive or outwit (Rahadi 2017).

Also, in a study carried out by Kolhar et al., (2021) titled 'Effect of social media use on learning, social interactions, and sleep duration among university students' and with aim; to examine social media use patterns among students, Social networking site use was prevalent among university

students because of the availability of smartphones and easy access to such sites through home computers. Social media use reduces the amount of time that students spend on academic activities.

The findings underscore the importance of creating awareness about the negative effects of such habits on academic performance among students. This will help students excel in academics and gain adequate knowledge, which in turn will enhance their performance in competitive examinations.

In an article on the Daily Trust newspaper, Itodo (2011) posits that there seem to be an alarming rate of social networking obsession among students today; a trend that could affect their academic, social and spiritual lives negatively if not properly controlled. Many concerned parents have expressed grave concern that they could hardly get the attention of their children and wards, as they seem to have been carried away by the fascinating world of social networks. Some youths are such social freaks that they have now carved out for themselves a world of fantasy and illusion for detached from reality. Sunday Observer observes that if the dangerous trend of social media network "obsession" if left unchecked could further affect an already collapsing education system in Pakistan. The reason students are performing poorly in school these days might not be farfetched. While poor quality of lecturers can quickly take the blame, one might think harder if the phrase "Facebook frenzy" has not been heard of. It is a common sight to see a youth chatting in sensitive and highly organized places like church, mosque and lecture venues. Some are so carried away that even as they are walking along the high way, they keep chatting. Attention has been shifted from visible to invisible friends, while important ventures like study and writing are affected in the process.

In a study of 884 students of different universities in Pakistan, (Olowu & Seri 2012) indicated that students in Pakistan are spending too much time on social networking sites at the detriment of other necessary things such as their studies. They explained that Youths' use of these social networking sites even point towards obsession. The youths have made the social media their top priority and continued to need more usage in order to feel satisfied. In Ogedebe, Emmanuel & Musa (2012), a study on Facebook and Academic Performance in Pakistan Universities was carried out on 122 university students; they tested six hypotheses to know the effect of Facebook on the academic performance of students in selected universities. The study tested among other hypotheses that the more time a student spends on Facebook, the lower his or her grade point

average will be. In Olubiyi (2012), the author observed that the bone of contention of the social media is the obsessive attitude of Pakistan youths towards its use. He pointed out that students waste their time through idle chats and other immoral acts. Students are so engrossed in the social media networks that they are almost 24 hours online. Even in classrooms and lecture theatres, it has been observed that some students are always busy pinging, 2going or Facebooking, while lectures are on. The result is that quality time that ought to be spent on academic research and other productive networking is lost.

In a recent study, students were asked to identify the benefits of using social media. They indicated that they use social media as a means to explore their social life and keep in touch with friends and family. This group of students did not see any benefits or improvements to their academic skills by using social media (Boateng & Amankwaa, 2016). It can be argued that the use of social media among student communities for the purposes of social connection and chatting with others distracts students' attention. It also distracts students from focusing on improving their academic knowledge, as the excessive time spent chatting on social media platforms may be considered unbeneficial and insignificant. Also, there are several negative influences and outcomes that can possibly occur with students as a result of criminal and illegal behaviors through social media. These are exemplified by identity theft, where anyone can create an account on any social media platform. By fabricating and disseminating content, this can be harmful to society in general and to students in particular (Kolan & Dzandza, 2018). Another negative aspect of social media is that the excessive use of social media among students for social purposes can lead to less time spent studying. As a result, students fail to keep up with assignment due dates, and more importantly, students can become addicted to social media which can affect students in the real world socially and academically (Mushtaq, 2018).

Additionally, there are studies that assert that a significant correlation exists between GPA and social media usage. Heffner and Tara (2016) pointed out that a student's GPA is highly affected by the use of social media. In other words, as long as students have a social media account, there is a chance that their GPA will decrease. The issue with the aforementioned study is that it only compared students who have an account on one social media platform to students who do not have social media accounts. The fact that they did not address other factors that may relate to students' academic performance generated a deficiency.

A study titled "Impact of students' attitudes towards social media use in education on their academic performance" by Goel and Singh (2016). The aim of this study was to examine the relationship between students' beliefs and attitude towards social media use in education and their academic performance. The first research question was about students' beliefs and attitudes toward usage of social media in education. The objective was to understand whether the management students have positive beliefs and attitude towards the usage of social media in education. The findings illustrate that management students had mixed views and beliefs about social media usage in education. The three dimensions of students' beliefs and attitudes towards social media i.e. opinion towards usage of social media in education; efficacy of social media tool as compared to traditional educational tools; utility of social media in improving skills have been used for measuring the students' beliefs and attitudes towards social media usage in education in management students of Delhi NCR region.

In a recent study carried out by Shafiq and Parveen (2023) on the topic "Social media usage: Analyzing its effect on academic performance and engagement of higher education students" with the aim to determine the effects of social media both good and bad on students' academic achievement and student engagement on social media sites. Correlation analysis was performed among the factors (6) related to student's academic performance and student engagement on social media networking platforms. The results show that factors such as knowledge sharing, perceived usefulness, students learning outcomes, and blended learning are significantly linked to the student's academic performance.

In addition, In 2018 Koranteng and Wiafe, (2019) investigated the association between the usage of sites in social networks, academic involvement, and sharing of knowledge through websites planned specifically for the activities conducted in academics. They designed a questionnaire using a theory of social capital and collected the data from 336 participants. Their results showed that engagement supports knowledge-sharing, and discovery is the only important predictor of engagement.

Also, in 2020 Rasheed et al. (2020) explained the use of social media among college students. They conducted a survey and collected data from 383 students from various universities. Their results showed that student use of social media is associated with their originality and involvement through knowledge-sharing behavior. In addition, they also discovered that cyberbullying plays a

limiting role. Therefore, they concluded that for students who have a lot of cyberbullying, the permeated relationship is weak.

Furthermore, in 2020 Kwayu et al. (2021) investigated the influence of practices of social media on sharing of knowledge. They conducted a survey and collected data from Tanzania's telecommunications organization. They performed SEM analysis using the collected data. Their work concluded that sharing of knowledge is moderated through the informal use of social media.

More to that, in 2020 Lacka et al. (2021) examined the relationship between technology and students' education. To study the target, they followed a two-step approach. In the first phase, they conducted a structured interview to gather the information we needed. In the second stage, we used a questionnaire to collect information. Their findings suggested that students should not rely on digital technology. They also found that virtual learning can improve students' achievement of college goals through additional input.

Moreover, in 2021 Zheng et al. (2021) compared the interaction of social media with face-to-face learning. They collected data from the required respondents and performed SEM analysis. Their results showed that emotional and cognitive learning is superior to face-to-face learning in mixed learning. They also found that no significant difference was observed in social occurrence, educational self-concept, or typical grades flanked by blended learning and face-to-face learning.

Also, in 2021 Hameed et al. (2022) investigated the impact of social media use on undergraduate students' academic performance. They used a qualitative method to gather information. The hypothesized hypothesis was subjected to an SEM analysis. Their findings demonstrated that using social networks for non-educational objectives hurts students' academic performance. They also discovered that multiple tasking on social networks doesn't affect college students' academic performance.

Furthermore, in 2021 Hosen et al. (2021) described the influence of social media on student performance in education. They used SEM analysis to test the hypothesis. They prepared a questionnaire and distributed it to the students of universities in Malaysia. Their research has empirically demonstrated that social media capabilities and personal motivation are core factors that facilitate sharing of knowledge and enhance the students' learning and performance.

More to that, in 2021 Said Salloum et al. (2021) showed the practices of social media influence the acceptance of e-learning students. They conducted a survey and collected data from the respective respondents. With the collected data they performed SEM analysis. Their results showed that sharing knowledge affects perceived usefulness.

Furthermore, in another study by Kirschner and Karpinski (2010); Kolek and Saunders (2008); Pasek, More, and Hargittai (2009); Pasek et al. (2009) examined the relationship between Social media usage and academic performance, and found there was no relationship between between Social media usage and grades. Saunders (2008) found that there were no differences in overall grade point average (GPA) between users and non-users of Facebook. Kirschner and Karpinski (2010), on the other hand, found that Facebook users reported a lower mean GPA than non-users; additionally, Facebook users reported studying fewer hours per week than non-users.The Kirschner and Karpinski (2010) paper examined differences between Facebook users and nonusers but did not analyze actual time spent on Facebook (though their methods suggest this information was collected). The majority of research conducted so far relating to use of social media within education has been focused on engagement or social presence. Examples include Walter & Barazova's (2008) study on how social media allows for propinquity within groups and addresses the perceived impact on social presence. Researchers have also looked at number of tweets and their communicative purposes (Boyd, Golder, & Lotan, 2010; Honeycutt, & Herring, 2009) and instances of job.

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Yebaoh & Ewur (2014) also posits that the use of Facebook, WhatsApp and Youtube increases the provisions and access to learning materials, anywhere, anytime and in various formats, and also has the potential to enhance students" cap abilities. Further analysis on the testing of the hypotheses showed that the use of Facebook can influence academic performance of students in Rivers State, the use of WhatsApp can influence students" academic performance and Youtube can influence students" academic performance and Youtube can influence students" academic performance and Youtube can influence students" usage of Facebook, WhatsApp and Youtube. Inaddition, it was concluded that, the result from the findings of this study showed that, though Social media have negative effects on student such as; distracting them from their academic work, they also have benefits and can be used appropriately. For instance, students can form online communities in order to plan for a project, have group discussions about class material, or use the Social networking sites(SNS) as a way to keep in contact when a student who has been absent needs to be updated on current academic information.

Another study by; Oye, Adam, and Zairah, (2012), in their study with Malaysian students using social networking site and its influence on their academic performance showed that social networking sites usage for only social and non-academic needs have an adverse effect on academic performance. Social media can also be defined as forms of electronic communication through which users interact among people in which they create, freely share, exchange and discuss information, ideas, personal messages, and other content about each other and their lives using a multimedia mix of personal words, pictures, videos and audio, utilizing online platforms while they are connected to the internet (Mingle & Adams, 2015).

A research by Lau (2017) using students in Hong Kong examined the use of social media and social multitasking and their effects on academic performance. He asserted that the use of social media for academic purposes was not a significant predictor of academic performance. Whereas the use of social media for nonacademic purposes adversely predicts academic performance.

Junco, Heibergert, and Loken et al (2011) conducted a study on 132 students in order to examine the relationship of social media and engagement of students with it, social media and grades of students. To examine this relationship the students were divided into two groups, one group use twitter and the other group did not use twitter account. It was used to make discussions about study material, organize the study groups in a manner, also post the announcements of class, and remain in touch with class fellows. Junco and his coworkers (2011) surprised that the students of Twitter group achieve greater GPAs and higher scores than the other group.

A study conducted by Amin et al., (2016), on "the effects of social media on student's academic performance", study is aimed at determining the impact of most popular factor of modern age social Media usage on the academic performances of the students. Survey showed that, respondents most commonly used Facebook, & twitter. While most of the respondent was agreed that using these social media they well prepare their home assignment and habit of these sites encourage them to concentrate on their studies. Students were agreed that it is their routine habit to use these social Media sites and they were also agreed that usage of these social media sites effect their academic performance positively. The findings from conducted studies came out to be mostly positive because students spend time of their day activities on these social media sites have able to share and generate new ideas and concepts related to their studies they also use these sites for having fun as these social websites are helpful in their academic work. Use of these interacting social media has become the routine habit of student they spend the major part of their time on these sites for entertainment and also concentrate on their studies. Students are a precious asset of any country. Through these social websites they do their academic work with enjoyment.

Michikyan, Subrahmanyam, and Dennis (2015) used a mixed-method approach to investigate the relationship between online academic disclosure (namely status updates about their academic experiences) and academic performance for 261 students with an average age of 22 years. Thematic analysis of their posts indicated that 14% of their contributions to Facebook were

academic in nature. On the other hand, the majority of students in Camilia, Sajoh, and Dalhtu (2013) used social media for academic purposes.

Several studies suggest that the time spent on social media takes away from the time available for studying. Alwagait, Shahzad, and Alim (2015) investigated the role of social media on academic performance of 108 Saudi students. Survey data revealed that Twitter was the most popular social network followed by Facebook. The average number of hours spent by students on social media was 25.3 hours. Sixty percent of the respondents acknowledged that excessive use of social media negatively impacted their performance, and indicated that 10 hours per week of use would ensure that their academic performance is not negatively impacted.

Similarly Krischner and Karpinski (2010) noted that some students do not have control on their social media while engaged in academic activities, and that they spend more time on these networks than they do studying or sleeping. They point out that empirical research suggests the negative impact of multitasking, or attempting to simultaneously process different sources of information, on performance. They underscore that this leads to increased study time and an increased number of mistakes on assignments.

Boogart (2016) conducted a study in four universities to investigate the impact of Facebook on campus life at four higher education institutions, analyzing the responses of 3134 students. He found significant relationships between time spent on Facebook, and several demographic variables. Females spent significantly more time on Facebook. Students with a GPA of 2.99 or less reported being longer on Facebook than those with a higher GPA. Also, students who are in their first and second years of undergraduate study spend more time using Facebook than those in their third year – the majority of the third year students (almost 70%) spent less than 30 minutes on day using it.

Julia, Langa & Miquel (2015) underscored the importance of social and relational factors in for educational attainment within higher education. They examined the impact of the connectedness afforded by social media tools on the performance of students within desperate disciplines of study creative and non-creative at the bachelor's level, 76 students participated from the business administration and management discipline which is considered as non-creative and 78 students participated from the industrial design engineering discipline which is considered as creative. The results of their study suggested that close social ties within the network of their discipline helped

students within the non-creative discipline perform better. The same was not true for the creative discipline in which the relationship between social ties and performance was inversely proportional. A few studies suggested a more positive potential for social media, but also the variation of how students interacted and perceived these tools. Camilia, Sajoh, & Dalhtu (2013) investigated this relationship in the Nigerian context. The responses of 536 students to a survey revealed that 97% of students used social media networks. Facebook was the most popular social network site, followed by "2go" and YouTube. The majority of students (91%) spent less than 4 hours a day on social networks. A quarter of the students reported that they believed that social media impacted their academic performance positively, 32% indicated that it impacted it negatively; the rest though it had no effect. About 75% of the students reported that they used it for academic assignments.

Wodzicki, Schawmmlein and Moskluik (2012) pointed out the potential of social media to develop students' self-directed learning skills because they give students a platform to explore subjects and gather information through accessing existing data on the web or interacting with like-minded students to constructively exchange ideas and build knowledge through informal and formal activities. Wodzicki et al (2012) however note that little is known about how these informal learning opportunities are harnessed and about the characteristics of the students who engage in these activities. To examine these relationships, they conducted three studies to investigate academic knowledge exchange via StudiVZ, an equivalent to Facebook on 774 users of StudiVZ students. The sample consisted of 498 women and 276 men between 19 and 29 years, which is a typical age range for German students. Analysis revealed that one fifth of students employed this social media tool to build knowledge. However, the majority, especially freshman, used it for social purposes such as networking and getting oriented to the university environment. The researchers concluded that knowledge exchange and social functions for using social networks should be regarded as intertwined rather than mutually exclusive.

### **CHAPTER THREE**

### METHODOLOGY

This study investigates the effects of social media on students' academic performance and social interaction in the UY1. This section discusses the research methodology used for collecting and analysing data. It reveals the processes used to collect data from the field. The section opens with a description of the research design and how the study was carried out. Next, we discussed the study area, the population of the study, the target population, and the accessible population from which our sample size was derived. We then received the sample and the sampling techniques that were employed. The data-gathering tools and methods for validating them were discussed. The processes for administering the instruments were also discussed, data analysis techniques elucidated, ethical considerations, and reiteration of the hypothesis.

## **Design of the Study**

A descriptive survey design was employed for this study, and a regressional prediction design was used to gather data. Using descriptive design designs and regressional analysis, you can predict results and elucidate the effect of independent variables on the dependent variable. Researchers use the regressional test to predict the effect of two or more variables or sets of scores (Creswell, 2012). According to Cresswell (2012), a research design is a strategy that details information on a certain issue and should be gathered and processed. It is a broad framework that describes the steps that will be taken to collect the data needed to respond to the research question or hypothesis. Cresswell (2012) claims that a research design outlines the steps the researcher will take, from writing or creating the hypothesis to the final data analysis. Data is gathered using a quantitative approach to ascertain whether and how strongly the two variables affect each other (excessive social media usage and teachers' work productivity). At the end of this research, quantitative data was collected and analysed, and the findings were generalised to the entire study population. With prediction design, researchers aim to predict outcomes by employing specific factors as predictors rather than merely associating variables. Therefore, prediction studies are valuable because they aid in predicting or anticipating future behaviour.

Research Design refers to the overall strategy that a researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring she will effectively address the research problem. It involves the planning, organization, collection and analysis of data so as to provide answers to questions such as: what techniques will be used to gather data? What sampling strategies and tools will be used? And how will time and cost time and cost constraints be dealt with (Leedy, 1993). Both quantitative and qualitative research paradigms are taken into consideration to conduct this study. To begin with, to collect quantitative data, the descriptive survey design was used, with the aid of a questionnaire made up of structured and close ended items was used in conducting this study. The use of the above methodologies for this study allows the researcher to gather data directly from the youth in their natural environment for the purpose of studying their attitudes, views and comments about their day to day interactions with social media (Leedy, 1993).

The design was adopted because it requires the researcher to establish the difference between Influence of Social Media (independent variable) on Academic Performance of Senior Secondary School Students (dependent variable).

## Area of the Study

The purpose of this section is to describe the study area in terms of locality, topography, and history. A research area is a physical site where a study or a current research project is being conducted. This research was carried out in the study was carried out the University of Yaounde 1 which is in Mfoundi division in Cameroon's Center Region. Mfoundi division is a Division in the Centre Region of Cameroon.

The University of Yaoundé is a university in Cameroon, located in Yaoundé, the country's capital. It was built with the help of France and opened in 1962 as the Federal University of Yaoundé, dropping the "Federal" in 1972 when the country was reorganized. In 1993 following a university reform the University of Yaounde was split into two (University of Yaoundé I and University of Yaoundé II) following the university branch-model pioneered by the University of Paris. (minesup.gov.cm, 2013).

The University of Yaounde I, consists of:

- The Faculty of Arts, Humanities and Social Sciences (FALSH)
- The Faculty of Sciences (FS)
- The Faculty of Medicine and Biomedical Sciences (FMSB).
- The higher teacher's Training College of Yaounde HTTC
- The National Advanced School of Engineering
- The Higher Teacher's Training Technical School of Ebolowa.

The main university complex is Ngoa-Ekelle with only 4 main faculties and several satellite campuses elsewhere. (uy1.uninet.cm, 2015)

# **Population of the Study**

According to Amin (2005), a population is the totality of all the components relevant to certain research. When concluding a sampling study, the researcher is interested in the entirety or aggregate of things or people with one or more traits in common (Amin, 2005). Asiamah et al. (2017) believe that population members must share at least one common attribute. This characteristic qualifies participants as population members. The population of this study was approximately 14,005 students from the four (4) faculties in the University of Yaounde1 campus (uniRank, 2023).

# Sample and Sampling Techniques

The researcher intends to generalize the findings to this population. The target population, often known as the parent population, may not always be reachable to the researcher (Amin, 2005). For Asiamah et al. (2017), the set of people or participants with particular traits of interest and relevance is referred to as the target population, and it is the portion of the general population that remains after it has been refined. The researcher must therefore identify and exclude members of the general population who might not be able to share experiences and ideas in sufficient clarity and depth from the target population. Thus, the target population of this study comprises four (4) faculties on the main campus of the UY1.

The sample size of this study was 384 students from the population using Taro Yamene formula. After determining the sample size of this study, simple random sampling technique was adopted for the study to ensure that each member of the target population has equal and independent chance of being chosen as respondent for the study.

No	FACULTY	NUMBER OF STUDENTS
1	Faculty of science (FS)	3845
2	Faculty of Education (FED)	2105
3	Faculty of arts, letters and humanities and social sciences (FALSH)	5039
4	Faculty of health and biomedical science (FMBS)	3016
	TOTAL	14005

Table 2: Distribution of target population

Source: University of Yaounde1 archives (2023)

# Accessible population

This is the population from which the sample is actually drawn (Amin, 2005). Asiamah et al. (2017) corroborate this by postulating that after eliminating every member of the target population who might or might not engage in the study or who cannot be reached during that time, the accessible population is then reached. The last group of participants is the one from whom data is gathered by polling either the entire group or a sample taken from it. If a sample is to be taken from it, it serves as the sampling frame. People eligible to engage in the study but unable to participate or would not be available at the time of data collection are referred to as the accessible population. The accessible population of this study is drawn from four (4) faculties of the UY1 where masters Students were targeted. The researcher, therefore, had access to 384 masters students drawn from the four (4) faculties.

# Sample of the study

Sampling is one of the most important steps in research; it will lead to valid results when carefully done. Sampling is a process of selecting representative portions of a population that permits the researcher to make utterances or generalisations concerning the said population. It can also be the process of selecting elements from a population so that the sampled elements selected represent the population. Sampling is involved when any choice is made about studying some people, objects, situations, or events rather than others. A good sample should be representative of the

population from which it was extracted. Regardless of the sampling approach, the researcher should be able to describe and relate the characteristics to the population (Amin, 2005).

The sample of this research work was drawn from the accessible population of 14005 master students of the UY1 main campus. A good sample is one that statistically represents the target population and is sizable enough to provide an answer to the research issue. Amin (2005) views a sample as a portion of the population whose results can be generalized to the entire population. The author adds that a sample can also be considered representative of a population. Majid (2018) corroborates this by asserting that because the community of interest typically consists of too many people for any research endeavour to involve as participants, sampling is a crucial tool for research investigations.

The sample size was determined using research advisor sample size table (2006), which constituted 384 students representing the entire masters student population of the four (4) faculties in UY1 main campus. They were drawn in such a way that all departments should be represented.

No	Faculty	Number of	Accessible	sample
		departments	population	
1	Faculty of science	10	3845	96
2	Faculty of education	5	2105	96
3	Faculty of arts, letters, humanities and social sciences	8	5039	96
4	Faculty of medicine and biomedical science	3	3016	96
	Total	26	14005	384

**Table 3:** Distribution of sample per school

Source: University of Yaounde1 archives (2023)

Sampling techniques refer to the various strategies a researcher uses to draw out a sample from the parent population of the study (Amin,2005). There are two main sampling techniques; probability and non-probability techniques. The sampling technique suitable for this study is probability sampling, in which all the elements of the population have some probability of being selected. Probability sampling will provide a base for the researcher to make generalisations about the population.

The type of probability sampling technique employed in this research is simple random sampling (SRS). Amin (2005) opined that a simple random sample is a sample obtained from the population in such a way that samples of the same size have equal chances of being selected. The masters students were selected to represent the four faculties in the accessible population. Through this technique, no department or faculty was left out, ensuring the representativeness of all faculties in the UY1 main campus.

#### **Instrument for Data collection**

An instrument is any tool that has been methodically built to collect and gather data accurately. The questionnaire is the tool utilised to gather data for this investigation. According to Amin (2005), a questionnaire is a professionally crafted tool used to gather data in line with the research questions and hypothesis requirements. He continues by saying that a questionnaire can be considered a self-report tool used to collect data on factors of interest in research. A questionnaire is a useful tool for gathering survey data, providing structured, frequently numerical data, being able to be administered without the researcher's presence, and frequently being comparatively simple to analyse, as Cohen et al. (2007) reiterated. It is a tool for gathering data with specific questions that the respondent must answer and then return to the researcher. There are two different kinds of questionnaires: closed and open-ended. The type of study is the only factor influencing the questionnaire selection. This study will use closed-ended questions in French and English, including Likert-style rating scales and dichotomous questions. These closed questions are simple to code and take little time to complete.

According to Creswell (2009), a questionnaire takes a quantitative approach to measure perceptions and provides data upon which generalisations can be made on the views of a given population on a particular phenomenon. This study's self-administered questionnaire was preferred, given that the targeted respondents could read and express themselves effectively.

The researcher used a self-administered questionnaire to capture the students view on the effects of social media on student's academic performance and social interactions in UY1. It is a rigorous instrument prepared by the researcher about the research problem under investigation, which is to be used to collect information from respondents. It consists of a carefully selected set of questions or statements requiring respondents' answers. The collection of the research developed questionnaire has 4 parts; A,B,C and D.

Part A contains information on the personal demographic data of the respondents, while part B to D contains twenty five (25) statements. Section B of the questionnaire focused on social media. Section C of the questionnaire hinged on the use of social media and student's academic performance. Section D focused on the use of social media and student's social interactions. This enables us to obtain information on the dependent variable, which is the actual problem. The tested scales used in this study were adapted from validated scales of previous studies. Suitable modifications were done to fit the new context of the current study. All items were measured using a five-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree).

Variables	Number of items
Social media	1-7
Student's academic performance	8-15
Student's social interactions	16-25

Source: University of Yaounde1 archives (2023)

All of the items were related to the research questions that guided the study. The response format for sections B to D is based on a five-point scale of strongly agree (SA), Agree (A), Neutral, Disagree (D) and Strongly Disagree (SD). In other words, the higher the aggregate scores on the rating scale, the more positive the response of the subjects and the lower the score, respondents indicated their level of agreement by ticking ( $\sqrt{}$ ) on the rating scale.

Table 5: Questionnaire options and corresponding weights on the Likert scale.

Option	Weight
Strongly agree	1
Agree	2
Neutral	3
Disagree	4
Strongly disagree	5

#### Validation of the Instrument of data Collection

According to Amin (2005), Validation refers to the accuracy of the instrument in measuring what the researcher intends to measure validity refers to measurement instrument and the level to which it saves the purpose of it design. The validity of the instrument can be affirmed with the reason that the questions were simple, understandable and easy for the respondents to answer. Face validity was adopted this was done by giving the initial draft of the questions to expert raters and were kindly requested to examine the adequacy of the statement relevance and suitability of language, structuring and sequencing of ideas and appropriateness of the instrument.

The comments and observations of these experts were used for modifications of the instrument. They modified some of the research questions and improved on the clarity of the questionnaire statements and the clarity of the response scale format of strongly Agree (SA), Agree (A), Disagree (D) and strongly Disagree (SD). Their comments were incorporated in the revised version of the questionnaire statements. Our method of distributing questionnaires to the respondent was faceto-face distribution. We later collected the questionnaire upon filling. This was to give room for the respondents to take their time in responding to the questionnaires without any inconvenience.

#### **Face Validity**

The questionnaire was carefully studied by specialists in instrument development and the supervisor in charge of the dissertation for examination and screening in case of any error. Some were adjusted, maintained and others disqualified.

#### **Content Validity**

The items/statements on the questionnaire were examined by the supervisor in relation to the objective of our work and ensuring that none is a negative question. After proper examination and acceptance of the statements, the content of the instruments was made valid. It was distributed to the students and during the exercise, the researcher permitted the respondents to pose questions where necessary. At the end, most of the copies were collected and the return rate was recorded.

## **Pilot Study**

The researcher first conducted a pilot test in the faculty of education. We did pilot study because we wanted to develop and test the adequacy of the research instrument. It might also give advance warning about where the main research project could fail, where research protocols may not be followed, or whether proposed methods or instruments are inappropriate or too complicated. The students responded and the internal consistency of the sections were determined using Cronbach alpha which gave us a reliability of .795. The coefficient for the sections was high enough for the study to realise the instrument because it reveals a complete understanding of the content of the questionnaire. This procedure ensures the content validity if the instrument.

#### **Reliability of the study**

The questionnaire was pre-tested with comparable respondents drawn from outside the area of the study. Results of the pilot testing were used in computing relevant reliability. The instruments were trial tested using 20 students in the faculty of education. After using the questionnaire for the study, we had a Cronbach alpha of .879 implying the instrument was reliable.

## Method of data collection.

The researcher took an authorisation of research from the Dean of the Faculty of Science of Education from the University of Yaounde 1. She went to the faculties and obtained permission from the students, administered the questionnaire at different meeting points on campus like in classrooms, at the secretariat and even on the road. During the exercise, the researcher permitted the teachers to ask questions were necessary. At the end, most of the copies were collected. This gave a return rate of 92.4%.

## The return rate of the instrument

The return rate indicates the number of questionnaires that were received at the end of the research after the questionnaires were administered to respondents. The return rate for this study was calculated using a simple percentage based on the formula below.

R=∑RQ

X %

∑AQ

Where;

R= Return rate

 $\sum$ RQ= Sum of questionnaires returned

 $\sum$ AQ= Sum of questionnaires administered

% = Percentage expressed as a hundred

The rate of return of questionnaires for this study was calculated as follows;

Total number of questionnaire administered = 384

Total number of questionnaires returned= 355

Therefore, return rate is = 356/384 \* 100 = 92.4%

## Methods of data analysis

This study made use of a method of data analysis by which each hypothesis is taken and material to answer or provide a test is provided. Consequently, regression method was used. Data were presented using tables and descriptive statistics like percentages, frequencies, and means were used. Correlation as well as the statistically more advanced method of multiple regression analyses was used in data analyses. The Sobel tests and Hayes process was used for the mediating effect.

A regression method was the main method used in this study. Regression methods form the backbone of much of the analyses in research. In general, these methods are used to estimate associations between variables, especially when one or more of these are variables are continuous. To answer the research question on how the independent variables affect the dependent variables, a standard multiple regression analysis was conducted on the data in SPSS. The multiple regression analyses attempt to find out whether independent variables are able to predict the dependent variable and which of those independent variables is the strongest predictor of the dependent

variable, in this case, the effects of social media, this is therefore, the most suitable analysis tool for the current research (Pallant, 2005).

# **Ethical Considerations**

Wilson and Hunter (2010) insist that before conducting research, there should be awareness on both parties of institutions and research participants. Thakhathi, Shepherd, and Nosizo (2018) maintains that ethical considerations in research are essential because they discourage fabrication or falsifying data, and thus encourage the quest of knowledge and truth, which is the main objective of undertaking a study. This research was conducted in respect to the fundamentals of research ethics. The respondents were assured of anonymity to avoid prejudice and victimisation. All the information gathered from the respondents was held in confidentiality in that names of the respondents were not indicated in the questionnaires, and the research findings were not used otherwise apart from for academic purposes. This study sought in-depth information on the effects of social media on student's academic performance and social interaction in the UY1. The contents of the questionnaires such as what is being studied, the purpose of the study, those involved in the study and the nature of participation of each subject and methods of data collection were conveyed to respondents in advance. Questions regarding religion, race, political and other sensitive issues were avoided.

# **CHAPTER FOUR**

# RESULTS

The chapter presents the findings of the study first according to the various research questions followed by the findings according to the hypotheses. The chapter ends with the summary of findings.

# **Return Rate of Questionnaire**

No	Faculties	Departments	Number	Number	Percentage	
			Administered	returned	return	
1	FS	Biological science and Mathematics	96	89	92.7%	
2	FED	Curriculum and evaluation, DED	96	87	90.6%	
3	FA	Geography and Linguistics	96	89	92.7%	
4	FMBS	Medicine and Medical laboratory science	96	90	93.7%	
	TOTAL		384	355	92.4%	

Table 6: Summary of Questionnaires administered and Returned

Table shows that out of the 384 questionnaires administered, 355 were retrieved, giving a return rate of 92.4%.

# **Data Frequencies**

# Participants demographic data

# Table 7: Age

		Frequency	Percent		Cumulative Percent
Valid	20-30 yrs	80	22.5	22.5	22.5
	31-40 yrs	198	55.8	55.8	78.3
	41 yrs and above	77	21.7	21.7	100.0
	Total	355	100.0	100.0	

Table 8: Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	156	43.9	43.9	43.9
	Female	199	56.1	56.1	100.0
	Total	355	100.0	100.0	

From the table above, based on ages of respondents it is noticed that, 55.8% (198) of the respondents were of ages 31-40years, 22.5% (80) of the respondents were of ages 20-30years and 21.7% (77) of the respondents were of ages 40 years and above.

Also, from the table above, based on gender 56.1% (199) of the respondents were female, 43.9% (156) of the respondents were male.

# **Findings according to Research Questions**

**Research Question 1:** What is the effect of social media on student's academic performance in UY1?

Seven (7) statements sought to investigate the various uses of social media. Table 7 below depicts the extent to which students engaged in social media activities.

No	Items	5	SA		A	l	N	]	D	5	SD	Μ	Std D
		F	%	f	%	F	%	f	%	f	%		
1	I use social media for learning	31	8.7	198	55.8	95	26.8	28	7.9	3	.8	3.63	.784
2	I use social media for entertainment	44	12.4	207	58.3	77	21.7	24	6.8	3	.8	3.74	.790
3	I use social media for communication	51	14.4	194	54.6	88	24.8	20	5.6	2	.6	3.76	.784
4	It is easier to study while using social media	37	10.4	165	46.5	119	33.5	30	8.5	4	1.1	3.56	.832
5	My peers and I use social media for the same purpose	34	9.6	197	55.5	97	27.3	25	7.0	2	.6	3.66	.768
6	I use social media because I have no option than to use it	59	16.6	189	53.2	77	21.7	28	7.9	2	.6	3.77	.836
7	I use social media because all useful school information are sent via social media	44	12.4	200	56.3	89	25.1	22	6.2	0	0.0	3.74	.749

**Table 9:** The use of social media

The table above shows a majority (64.5%) of the respondents use social media for learning, 8.7% do not use social media for learning. This was confirmed by a mean of 3.64. Also, for item 2, a

majority (70.7%) of the respondents agreed to using use social media for entertainment and 7.6% disagreed to using social media for entertainment. This is confirmed by a mean of 3.74.

For item 3, a majority of the respondents (69%) use social media for communication and 6.2% do not. This is confirmed by a mean of 3.76.

For the fourth item, a majority of respondents (56.9%) agreed that it is easier to study while using social media and 9.6% disagreed. This is confirmed by a mean of 3.56.

For the item 5, a majority of respondents (65.1%) agreed that My peers and I use social media for the same purpose and 7.6% disagreed. This is confirmed by a mean of 3.66.

For the sixth item, a majority of respondents (69.8%) use social media because I have no option than to use it" and 8.5% disagreed. This is confirmed by a mean of 3.77.

For item 7, a majority of respondents (68.7%) use social media because all useful school information are sent via social media and 6.2% disagreed. This is confirmed by a mean of 3.74.

The next table provides more statistics on the first research question, eight (8) statements seek to find out what is the effect of social media on student's academic performance in UY1?

No	Items	SA		1	Α		Ν		D		D	Μ	Std D
		F	%	F	%	f	%	F	%	F	%		
1	Social media is a vital source of information for my academic work	81	22.8	215	60.6	48	13.5	10	2.8	1	.3	4.02	.708
2	I easily perform academic tasks when using social media	86	24.2	201	56.6	58	16.3	9	2.5	1	.3	4.01	.730
3	My grades have improved thanks to	85	23.9	200	56.3	62	17.5	7	2.0	1	.3	4.01	.720

**Table 10:** The use of social media and student's academic performance.

	the use of social												
	media												
4	I use social media to do research	88	24.8	205	57.7	57	16.1	4	1.1	1	.3	4.05	.690
5	I have high scores when I do my assignments using social media	95	26.8	210	59.2	41	11.5	6	1.7	3	.8	4.09	.720
6	I hardly get distracted when doing academic work using social media	111	31.3	180	50.7	62	17.5	2	.6	0	0.0	4.12	.703
7	I better understand courses taught using social media	38	10.7	140	39.4	127	35.8	37	10.4	13	3.7	3.43	.943
8	I can easily remember what I studied when I use social media.	8	2.3	85	23.9	103	29.0	156	43.9	3	.8	2.82	.880

The table above shows a majority (83.4%) of the respondents agree that "Social media is a vital source of information for my academic work", 3.1% disagreed. This was confirmed by a mean of 4.02.

For item 2, a majority (80.8%) of the respondents easily perform academic tasks when using social media, 2.8% disagreed. This was confirmed by a mean of 4.01.

For the third item, a majority (80.2%) of the respondents grades have improved thanks to the use of social media, 2.3% disagreed. This was confirmed by a mean of 4.01.

For item 4, a majority (82.5%) of the respondents use social media to do research, 1.4% disagreed. This was confirmed by a mean of 4.05.

For the fifth item, a majority (86%) of the respondents have high scores when they do assignments using social media, 2.5% disagreed. This was confirmed by a mean of 4.09.

For item 6, a majority (82%) of the respondents hardly get distracted when doing academic work using social media, 0.6% disagreed. This was confirmed by a mean of 4.12.

For the seventh item, a majority (50.1%) of the respondents better understand courses taught using social media, 14.1% disagreed. This was confirmed by a mean of 3.43.

For item 8, a majority (44.7%) of the respondents disagreed to the statement that they can easily remember what they study using social media., 26.2% agreed. This was confirmed by a mean of 2.82.

Research question 2: What is the effect of social media on student's social interactions?

Ten (10) statements sought to investigate the various uses of social media. Table 9 below depicts the effect of social media on student's social interactions in UY1.

No	Items	SA			Α		Ν		D		D	Μ	Std D
		f	%	F	%	F	%	f	%	F	%		
1	Learning with friends and peers on social media is better	16	4.5	53	14.9	134	37.7	124	34.9	28	7.9	2.73	.961
2	Social media allows me to interact with my teachers	13	3.7	103	29.0	134	37.7	86	24.2	19	5.4	3.01	.946
3	Social media creates an environment for my peers and I to share ideas on academic issues	16	4.5	109	30.7	112	31.5	97	27.3	21	5.9	3.00	.999

Table 11: The use of social media

4	<b>T 1 1 1</b>												
4	I understand better when I work in groups with my peers	17	4.8	106	29.9	112	31.5	101	28.5	19	5.4	3.00	.995
5	Social media is highly instrumental to my communication with friends	12	3.4	87	24.5	137	38.6	103	29.0	16	4.5	2.93	.921
6	My peers and I only talk about school related things on social media	88	24.8	214	60.3	44	12.4	9	2.5	0	0.0	4.07	.684
7	It is easy to understand notes sent on social media than in class	37	10.4	161	45.4	111	31.3	38	10.7	8	2.3	3.50	.899
8	Group works are better when done on social media	39	11.0	158	44.5	110	31.0	33	9.3	15	4.2	3.48	.954
9	I interact better with my teachers/ lecturers on social media	39	11.0	220	62.0	75	21.1	16	4.5	5	1.4	3.76	.758
10	Social media helps me improve my social interaction with other students	35	9.9	146	41.1	128	36.1	41	11.5	5	1.4	3.46	.873

From the table above, a majority (42.8%) of the respondents disagreed that learning with friends and peers on social media is better, 19.4% agreed. This was confirmed by a mean of 2.73.

For item 2, a majority (32.7%) of the respondents agreed that social media allows me to interact with teachers, 29.6% disagreed. This was confirmed by a mean of 3.01.

For the third item, a majority (35.2%) of the respondents agreed that social media creates an environment for them and their peers to share ideas on academic issues, 33.2% disagreed. This was confirmed by a mean of 3.00.

For item 4, a majority (34.7%) of the respondents understand better when they work in groups with their peers, 33.9% disagreed. This was confirmed by a mean of 3.00.

For the fifth item, a majority (33.5%) of the respondents disagreed that social media is highly instrumental to their communication with friends, 27.9% disagreed. This was confirmed by a mean of 2.93.

For item 6, a majority (85.1%) of the respondents agreed that they and their peers only talk about school related things on social media, 2.5% disagreed. This was confirmed by a mean of 4.07.

For the seventh item, a majority (55.8%) of the respondents agreed that, it is easy to understand notes sent on social media than in class, 13% disagreed. This was confirmed by a mean of 3.50.

For item 8, a majority (55.5%) of the respondents agreed that, group works are better when done on social media, 13.5% disagreed. This was confirmed by a mean of 3.48.

For the ninth item, a majority (73%) of the respondents interact better with their teachers/ lecturers on social media, 5.9% disagreed. This was confirmed by a mean of 3.76.

For item 10, a majority (51%) of the respondents agreed that social media helps them improve their social interaction with other students, 12.9% disagreed. This was confirmed by a mean of 3.46.

**Research question 3**: What is the mediating effect of social interactions on social media usage and student's academic performance?

## **Outcome variable: SI**

 Table 12: Model summary for social interaction

**Model Summary** 

R	R-sq	MSE	F	Dfl	df2	Р
.2480	.0615	.3751	23.1297	1.0000	354	.0000

From the tables above, R coefficient is 0.2480 which indicates a weak positive correlation and Rsq is 0.0615 which means that, social media does not fully explain the different variations in social interactions and both can exists independently. The P value is 0.0 which is < 0.05, this indicates that there is a 95% Confidence interval thus a significant linear relationship between social media and social interactions. Also, the F value is 23.1297 which is > 0 indicating that there is a relationship between social media and social interactions. The F value shows the Ho2 is rejected and Ha2 accepted; Social media has an effect on student's social interactions in UY1.

Table 1	13:	Model	for	Social	interaction
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## Model

	coeff	se	t	р	LLCI	ULCI	
Constant	2.3881	.1921	12.4294	.0000	2.0103	2.7660	
USM	.2461	.0512	4.8093	.0000	.1455	.3467	

From the table above, for social media, the coefficient value is 0.2461 and Standard error value is 0.0512 which means the coefficient varies across different cases by 0.512. The coefficient value is > se value which implies a probability that the coefficient is not zero. The t value (4.81) is > +2 thus the greater the confidence that the coefficient is a predictor. The LLCI and ULCI values are > 0 thus mediation occurs with a 95% confidence that there is a significant linear relationship between social media and social interactions (also because p value is < 0.05).

## **Outcome variable: AP**

 Table 14: Model summary for Academic performance

#### **Model Summary**

R	R-sq	MSE	F	Dfl	Df2	р
.2171	.0471	.2372	8.7023	2	353	.0002

From the tables above, R coefficient is 0.2171 which indicates a weak positive correlation and Rsq is 0.0471 which means that, social media does not fully explain the different variations in students' academic performance and both can exists independently. The P value is 0.0002 which is < 0.05, this indicates that there is a 95% Confidence interval thus a significant linear relationship between social media and students' academic performance. Also, the F value is 8.7023 which is > 0 indicating that there is a relationship between social media and students' academic performance. The F value shows the Ho1 is rejected and Ha1 accepted; Social media has an effect on student's academic performance in UY1.

 Table 15: Model for Academic performance

	Coeff	Se	Т	Р	LLCI	ULCI
constant	3.0684	.1832	16.7497	.0000	2.7081	3.4287
USM	.1174	.0420	2.7946	.0055	.0348	.2000
SI	.0977	.0423	2.3077	.0216	.0144	.1809

Model

From the table above, for social media, the coefficient value is 0.1174 and Standard error value is 0.0420 which means the coefficient varies across different cases by 0.0420. The coefficient value is > se value which implies a probability that the coefficient is not zero. The t value (2.7946) is > +2 thus the greater the confidence that the coefficient is a predictor. The LLCI and ULCI values are > 0 thus mediation occurs with a 95% confidence that there is a significant linear relationship between social media and academic performance (also because p value, 0.0055 is < 0.05).

Also, for social interaction, the coefficient value is 0.0977 and Standard error value is 0.0423 which means the coefficient varies across different cases by 0.0423. The coefficient value is > se value which implies a probability that the coefficient is not zero. The t value (2.3077) is > +2 thus the

greater the confidence that the coefficient is a predictor. The LLCI and ULCI values are > 0 thus mediation occurs with a 95% confidence that there is a significant linear relationship between social interactions and academic performance (also because p value, 0.0216 is < 0.05).

This goes further to reject Ho3 and accept Ha3: There is a mediating effect between social interactions, social media and academic performance.

## Direct and Indirect Effects of Social Media (IV) On Academic Performance (DV).

Table 16: Direct effect of IV on DV

Effect	Se	Т	Р	LLCI	ULCI
.1174	.0420	2.7946	.0055	.0348	.2000

From the table above, for social media, the effect value is 0.1174 and Standard error value is 0.0420. The t value (2.7946) is > +2 thus the greater the confidence that the coefficient is a predictor. The LLCI and ULCI values are > 0 thus mediation occurs with a 95% confidence that there is a significant linear relationship between social media and academic performance (also because p value, 0.0055 is < 0.05). Thus social media has a direct effect on academic performance.

Table 17: Indirect effect(s) of IV on DV

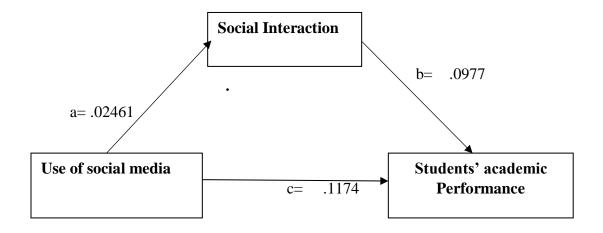
	Effect	BootSE	BootLLCI	BootULCI
SI	.0240	.0103	.0052	.0459

Furthermore, the table above shows that for social interaction, the effect value is 0.0240 and Boot Standard error value is 0.0103. The BootLLCI and BootULCI values are > 0 thus mediation occurs with a 95% confidence that there is a significant linear relationship between social interactions and academic performance. Implying that, social media has an indirect effect on academic performance with social interaction being the mediating variable (mediator).

## **Analysis Notes and Errors**

Level of confidence for all confidence intervals in output: 95.0000 Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

## **Statistical diagram**



In this analysis, IV is use of social media, DV is students' academic performance and MV is social interaction. Following Baron and Kenny's (1986) mediation analysis, a complete mediation happens when a) IV significantly predicts DV b) IV significantly predicts MV (path a is significant), c) MV significantly predicts DV, (path b is significant) and d) when mediator enters the IV-DV relationship, the total effect reduces significantly to non-significant. If the direct effect does not reduce significantly to non-significant, mediation only happens partially. In addition, the indirect effect for the mediational analysis has to be significant, and the Sobel test demonstrates that the value of indirect effect is greater than zero (z > 1.96).

The results showed that there was a significant total effect between use of social media and students' academic performance (B = .1174, p <.001), and path a (i.e., use of social media on social interaction) (B = 0.098, p <.001) and path b (i.e., social interaction on students' academic performance) (B = 3.068, p <.001) were both significant. Finally, when social interaction entered the relationship between use of social media and students' academic performance, the direct effect (B = 0.117, p <.001) was significant. In addition, the Sobel test for the indirect effect is z = 2.7946, p <.001; therefore, it was concluded that a partial mediation occurred between use of social media on students' academic performance.

## Hayes Process (2013)

Following Hayes' (2013) Macro Process via bootstrapping method, to consider a mediator has mediational effect when (1) the indirect effect (IE) of use of social media on students' academic performance via social interactions (i.e., IE = path a x path b; a = the effect of use of social media on student's social interactions, b = the effect of student's social interactions on students' academic performance) and (2) the bias corrected 95% Confidence interval (CI) around the IE from 5000 bootstrap re-samples. We accepted the IE as statistically significant only if its bias corrected 95% CI excluded zero.

The results showed that there was a significant total effect between use of social media and students' academic performance (B = .117, p <.001), and path a (i.e., use of social media on social interaction) (B = 0.098, p <.001) and path b (i.e., social interaction on students' academic performance) (B = 3.068, p <.001) were both significant. Finally, when social interaction entered the relationship between use of social media and students' academic performance, the direct effect (B = 0.114, p <.001) was significant. In addition, the bias corrected 95% CI is 1.16, and CI 95% = .0348 to .2000 to 1.45 which excluded zero. Hence, social interaction is considered as a mediator for use of social media on students' academic performance.

#### **CHAPTER FIVE**

#### DISCUSSION

This study investigated the effect of social media on student's academic performance and social interactions in the UY1, the primary objective of this study was to examine the effects of social media on student's academic performance and social interaction. Also, this chapter will be discussing the results from empirical studies and relating it to the findings from this study according to the research questions, the recommendations and limitations will also be addressed in the subsequent paragraphs.

Surprisingly, in this study the majority of the participants indicated using social media in academic related purposes such as: sharing information with classmates and having social media groups for some of the courses and following the latest developments in their field through social media which lead to the conclusion that when used correctly, social media has a positive impact on student's academic performance through student's social interactions. The alternative hypothesis (Ha) was accepted which states that There is a relationship between use of social media, student's academic performance and social interactions. Moving forward, the next paragraphs show the relationship between the empirical studies and this present study.

#### **RQ1:** What is the effects of social media on students' academic performance in UY1?

In a study conducted by Amin et al., (2016), on "the effects of social media on student's academic performance", study is aimed at determining the impact of most popular factor of modern age social Media usage on the academic performances of the students. Survey showed that, respondents most commonly used Facebook, & twitter. Most of the respondent agreed that by using these social media they prepare their home assignment and habit of these sites encourage them to concentrate on their studies, they also agreed that usage of these social media sites effect their academic performance positively. That is the case with this present study, a majority of the students agreed to using social media for studies and academic related purposes and which positively affected their academic performance where there is a direct and an indirect effect of social media on student's academic performance.

In a study by Oye, Adam, and Zairah, (2012), with Malaysian students using social networking sites and its influence on their academic performance showed that social networking sites usage

for only social and non-academic needs have an adverse effect on academic performance which is similar with our results as social media has a direct and indirect relationship with student's academic performance. The students that agreed to using social media mostly for academic purposes also agreed to have ease in doing assignments and better final results than those who disagreed.

Also, in another study by Kirschner and Karpinski (2010); Kolek and Saunders (2008); Pasek, More, and Hargittai (2009); Pasek et al. (2009) examined the relationship between Social media usage and academic performance, and found there was no relationship between Social media usage and grades, which is contrary to the results of this present study which indicated that there is a relationship between social media and student's academic performance especially through proper social interactions as a mediator.

A research by Lau (2017) using students in Hong Kong examined the use of social media and social multitasking and their effects on academic performance. He asserted that the use of social media for academic purposes was not a significant predictor of academic performance. Whereas the use of social media for nonacademic purposes adversely predicts academic performance. Our results tie with this because, the students who agreed to using social media for academic purposes than nonacademic purposes agreed to social media improving their academic performances through social interactions with peers and teachers.

However, Alwagait (2015), Wodzicki, Schawmmlein & Moskluik (2012) have shown that students were hardly interested in using social media networks for study related knowledge but this is not the case with this present study because, students of the UY1 have whatsapp groups, telegram groups where school related information like soft copy notes, assignments, lectures and announcements are sent regularly and one is safe to say that, they cannot do without using social media for academic purposes.

From previous research (Tariq, Mehboob, Asf, & Khan, 2012; Boogart, 2016; Michikyan, Subrahmanyam, & Dennis, 2015; Kirschner & Karpinski, 2010) which proposed a negative impact of social media usage on the students' academic performance. In the present study, (44.7%) of the respondents disagreed to the statement that they can easily remember what they study using social media, 26.2% agreed and also, (42.8%) of the respondents disagreed that learning with friends and

peers on social media is better, 19.4% agreed. This means that, a majority have problems with learning on social media but the percentage is very low.

## RQ2: What is the effects of social media on students' social interactions in UY1?

Wodzicki, Schawmmlein and Moskluik (2012) pointed out that the majority, especially freshman, used social media for social purposes such as networking and getting oriented to the university environment. The researchers concluded that knowledge exchange and social functions for using social networks should be regarded as intertwined rather than mutually exclusive. This ties with the present study because there is an indirect relationship between social media use and student's academic performance through social interactions which takes place when students network with each other to gain and share information by chatting, doing group assignments, presentations etc.

Also, Chen et al. (2009), Eid and Al-Jabri (2016) and Ansari and Khan (2020) demonstrated that dynamic interaction and online knowledge-sharing behaviours through social media networks have had a significant impact on the efficacy of collaborative learning and on fostering students' engagement with their courses. This present study particularly agrees that social media use for academic purposes through social interactions leads to better academic performance of the students in UY1.

However, according to other studies Lau (2017) and Janssen, & Brumby (2010) have shown that media multitasking behavior is a predictor of a poor academic performance and that it affects the students' concentration specially during studying. The difference may be explained by the fact that the majority of students in the current study use social media for academic related purposes, consequently, it does not distract them from studying but it is rather helping them.

# **RQ3:** What is the mediating effect of social interactions, on social media usage and student's academic performance?

Findings further revealed that nursing students believed that they acquired increased knowledge and skills through simple interactions with their colleagues. Thalluri and Penman (2015) reported results from nursing students who believed that, through social media, collaboration becomes easier and facilitates rapid interaction and communication. Further, Ferguson et al. (2016) reported that nursing students can receive instant feedback on their work through social media platforms. Based on these findings, social media appears to provide a simple, freely accessible and friendly environment that promotes social interaction and an exchange of ideas and knowledge. This, in turn, develops student engagement through learning outside of the classroom environment. In our present study, social interactions acts as a mediator between social media and academic performance, where if proper social interaction takes place, students will have better academic performances as they discuss and share ideas among themselves.

Furthermore, the results of the present study show that the majority of the participants use social media for academic related purposes as a mean of communication, they use it connect with their peers and lecturers in order to discuss class related contents.

Also, a systematic review by M. Almutairi et al., (2022) with the aim, to investigate the impact of social media use in relation to student engagement in nursing education. This study revealed that, using social media to support nursing students' learning has positive benefits in terms of promoting several aspects of their engagement, such as rapid interaction and communication. The main overarching theme across most of the reviewed studies was communication and interaction. Several studies supported this finding. For example, Chen et al. (2009), Eid and Al-Jabri (2016) and Ansari and Khan (2020) demonstrated that dynamic interaction and online knowledge-sharing behaviours through social media networks have had a significant impact on the efficacy of collaborative learning and on fostering students' engagement with their courses.

From the findings of this present study, the mediating effect of social interactions is significant and plays a vital role in helping students have better academic performances while using social media for learning.

To conclude, the discussion and the results show that there is a significant linear relationship between social media and academic performance. There is also an indirect effect of social media on academic performance with social interaction as a mediator. This explains the positive correlation between social media and student's academic performance.

## Recommendations

There are a few things I will like to recommend which can help further researchers and better the quality of our educational system.

- Social media awareness for students is needed to address the social media addiction issue.

- Also, using social media as a communication platform in discussing course related content falls with the development of communities of learners which is seemingly on high demand, this area might require further investigation.
- Social media though having its negative sides is very vital for education, so the higher education bodies should put some facilities in place to help students get engaged positively in social media. For example providing internet services and electricity in classrooms.
- Also, workshops and seminars should be organized to train teachers and students on how to navigate social media platforms for learning.
- Both the lecturers and students should put into practice the communication function of social media in order to facilitate the teaching and learning process.
- Significant differences in the behavior of students from different academic majors and different academic status in perceiving and using social media emerged which might require further investigation.

# Limitations

There are a number of limitations in this study that should be further addressed in the future. First, the questionnaire had to be translated to French for easy comprehension by the French speaking students which somehow changes the actual sense of some terms.

Also the neutral option in the survey in some way encouraged the students to choose it to avoid the effort of thinking and deciding.

Furthermore, some of the students were not very welcoming and willing to answer the questionnaire.

More to that, the procedure to get the total number of students from the required hierarchy was very long and complicated.

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Technology Systems Journal of Educational Technology Systems 34 (1) 5 - 323

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TABLE OF	CONTENTS
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TABLE OF CONTENT	
DEDICATION	ii
CERTIFICATION i	iii
ACKNOWLEDGEMENTSi	iv
LIST OF TABLES	.v
LIST OF ABBREVIATIONS	vi
ABSTRACT v	'ii
RESUMEvi	iii
CHAPTER ONE: INTRODUCTION	.1
Background of the study	.4
Historical background	.4
Theoritical background	.6
Contextual background	.7
Conceptual background1	0
Problem statement1	13
Research Objectives1	15
Research questions1	5
Research hypothesis1	5
Significance of the study1	6
Scope and limitations1	6
Definition of Keywords1	6
CHAPTER TWO: LITERATURE REVIEW1	8
Conceptual framework1	8
Social media1	8
Defining social media2	20
The uses, benefits and challenges of Social Media2	21
Uses and benefits of social media2	21
Challenges and problems associated with the use of social media2	23
Social Media in Education2	25
Facebook and Twitter Use Among University Students2	26

Whatsapp on Academic Performance of Students	29
YouTube on Academic Performance of Students	30
Instagram and Snapchat Use Among University Students	30
Social Media use and Academic Performance	32
Usage of social media and social interactions	39
The mediating effect of social interaction on social media and academic performance	40
Conceptual diagram	42
Theoretical framework	43
Zone of proximal development (ZPD)	47
Empirical review	48
CHAPTER THREE: METHODOLOGY	63
Design of the Study	63
Area of the Study	64
Population of the Study	65
Sample and Sampling Techniques	65
Accessible population	66
Sample of the study	66
Instrument for Data collection	68
Validation of the Instrument of data Collection	70
Face Validity	70
Content Validity	70
Pilot Study	71
Reliability of the study	71
Method of data collection.	71
The return rate of the instrument	71
Methods of data analysis	72
Ethical Considerations	73
CHAPTER FOUR: RESULTS	74
Return Rate of Questionnaire	74
Data Frequencies	75
Participants demographic data	75

Findings according to Research Questions	76
Outcome variable: SI	82
Outcome variable: AP	83
Direct and Indirect Effects of Social Media (IV) On Academic Performance (DV)	84
Analysis Notes and Errors	84
Statistical diagram	85
Hayes Process (2013)	86
CHAPTER FIVE: DISCUSSION	87
Recommendations	90
Limitations	91
REFERENCES	92
TABLE OF CONTENTS	100